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SEARCH REQUEST FORM

Requestor's Name:	Serial Number:	
Date:	Phone: Art Unit:	
that may have a special meaning. Give	arch topic. Describe specifically as possible the subject matter to be searched. De examples or relevant citations, authors keywords, etc., if known. For sequences lude a copy of the broadest and/or most relevant claim(s).	
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Gene encoding nove Skin cell cDNA, SE Rat cDNA isolated

Primer specific

Page 1

Rat cDNA isolated
Rat cDNA isolated
Mouse zacrp2 DNA,
Gene encoding nove
Human zacrp3 degen
Primer specific fo

Skin cell cDNA, SE Skin cell cDNA, SE

cDNA encoding rat

AAF94076 ABK35591 AAC99776 ABL34928 AAZ61633 AAZ61730 AAC99566 AAC995663

ABL34718 ABL34815

AAC64064 ABK35590

Human secreted pro Human secreted pro Human prostate exp CDNA encoding SRT Human foetal liver Human brain expres

AAF93419 ABA60188

AAX3955

AAK08465 AAK34347 AAI40069 ABS09051

ABA72727 AAK21157

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foetal liver brain expres bone marrow

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AAI53148 ABS21483 AAF45100

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                                         GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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Secreted protein; transmembrane protein; PRO1484; PRO4334; PRO1122; PRO1889; PRO1890; PRO1887; PRO1785; PRO4353; PRO44357; PRO4405; PRO4405; PRO4405; PRO4405; PRO4406; PRO440 cDNA encoding a novel polypeptide designated PRO1484. ALIGNMENTS Location/Qualifiers AAA96336 standard; cDNA; 1712 01-MAR-2000; 2000WO-US05601. 08-FEB-2001 (first entry) Ø 77..817 /*tag= 77..142 /*tag= 1 WO200056889-A2. Homo sapiens sig_peptide 28-SEP-2000 AAA96336; Key

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and are therefore useful for treating kidney disorders associated with decreased mesangial cell function such as Bergers disease or other nephropathies associated with Schoulein-Henoch purpura, cellac disease, dermatitis herpetiformis or Crohns disease. The nucleic acids may be used to generate transgenic animals for use in development and screening of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence encodes a secreted or transmembrane polypeptide. The specification describes polypeptides designated PRO1484, PRO4334, PRO1122, PRO1869, PRO1890, PRO1897, PRO4455, PRO44055, PRO44055, PRO44054, PRO44054, PRO44054, PRO44059, PRO5030, PRO4424, PRO4422, PRO4430, PRO4409, PRO5030, PRO6424, PRO4422, PRO4430 and PRO4409, PRO1899, PRO1899, PRO5030, PRO4422, PRO4430, PRO4409, PRO1899, PRO1899, PRO5030, PRO5030
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DB 21; Length 1712; Sequence 1712 BP; 491 A; 358 C; 388 G; 475 T; 0 other; Score 1710.4; Pred. No. 0; 0; Mismatches 99.98; Best Local Similarity 99.9 Matches 1711; Conservative Similarity Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-inflammatory; keratolytic; anti-HIV; anti-allergic; antianaemic; antiarteriosclerotic; antiasthmatic; antidiabetic; nephrotropic; cancer; antigout; dermatological; antithyroid; virucide; hepatotropic; antibactinimmunosuppressive; cytostafic; fungicide; protozoacide; antibacterial; gene therapy; diagnostic; immunological disorder; viral infection; ss; bacterial infection; fungal infection; parasitic infection; immunogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents the cDNA for a human immune system molecule (IMOL) isolated as clone 1890540 from the Incyte BLADTUT07 Library. The human IMOLS (AAB15536-B1550) and their encoding polynucleotides (AAA95775-A95789), and compositions comprising them are useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New human immune system molecules 1-15 and polynucleotides encoding them useful for diagnosing, treating or preventing e.g. immunological disorders, infections, cell proliferative disorders, microbial
                                                                          ACCCTTTCCTTTTGATCCACAAAATACATTAAAAACTCTGAATTCACATACAATGCTATTT
                                       AACAAATGTCATAAATATCTCATAGAGGTACAGTGCCAATAGATATTCAAATGTTGCATG
                                                                                                                                                                                TAAAGTCAATAGATTTTAGCTATAAAGTGCTTGACCAGTAATGTGGTTGTAATTTTGTGT
                                                                                                                                                                                                                                  ATTITGACCTGGCTTTAGATAAAACTGTGGCAAGAAAATGTAATGAGCAATATATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human immune system molecule cDNA from Incyte clone 1890540.
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                                                                                                                                                                                                                                                                                                1681 ATAAACACACCTTTGTTAAAGATAAAAAAA 1712
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                                                                                                                                                                                                                                                                                                                                                                              BP
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                                                                                                                                                                                                                                                                                                                                                                            AAA95787 standard; cDNA; 1760
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99US-0132647
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PHARM INC.
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P-PSDB; AAB15548.
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05-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                     AAA95787;
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1321
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AAA95787
ID AAA9
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ceptession of activity of indections. Allos, Addison's disease), hemation, actinic kertosis, Allos, Addison's disease), hematopoietic cancer, infections caused by virus (e.g. adenovirus, parmation, actinic kertosis, Allos, Addison's e.g. adenovirus, parvovirus, coronavirus), bacteria (e.g. staphylococcus, Streptococcus, Shigella), fungi (e.g. Aspergillus, Blastomyces), parasites (e.g. Shigella), and cancers (e.g. actinic kertatosis, arteriosclerosis, bursitis), and cancers (e.g. actinic kertatosis, arteriosclerosis, bursitis), and cancers (e.g. leukemia, melanoma, sarcoma). The peptides are also useful as immunogens for the development of antibodies that specifically recognizes these peptides. The polynuclectides may be used to detect and quantify gene expression in biopsided tissues in which expression of IMOL may be correlated with the disease, as targets in a microarray, to detect differences in gene sequences among normal, carrier and affected individuals, and for screening libraries of compounds in drug screening techniques. Antibodies which specifically bind to IMOL may be used for the disquosis of disorders characterized by expression of IMOL, or in assays to monitor patients being treated with IMOL or agonists, antagonists, or inhibitors of IMOL.
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diagnosis, treatment or prevention of immunological disorders, infections and cell proliferative disorders, including cancer. The may be used to treat or prevent disorders associated with decreased expression or activity of IMOL, such as immunological disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGCATCTGCCCGAGGAGCACCACGGAGGACTCTGCTGCTTCTCAGGGAGACTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTCTGTTGAGAATCATGCTTTGGAGGCAGCTCATCTATTGGCAACTGCTGGCTTTGTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 21; Length 1760;
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Best Local Similarity 99.9°
Matches 1711; Conservative
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BP

CDNA; 1696

standard;

AAC64058

Human zacrp3 cDNA, SEQ ID NO:1.

(first entry)

19-FEB-2001

AAC64058; AAC64058

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                                                                                   887
CACCTTTGCAGGATTCCTGCTCTTTGAAACTAAGTAAATATATGACTAGAATAGCTCCAC
                                                                                                   TTTGGGGAAGACTTGTAGCTGAGCTGATTTGTTACGATCTGAGGAACATTAAAGTTGAGG
                           GGATGAGGTTTGGCTGCGAATGGGCAATGGCGCTCTCCATGGGGACCACCAACGCTTCTC
                                                                                                                                                                                                                                                                                                                              TTATTCTTTATAACATTGAGAGAATCGGATGTAGTGATATGACAGGGCTGGGGCAAGAA
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The invention relates to the human zacrp3 protein (AAB29580) and to nucleic acids which encode it (AAC64058, AAC64063). Zacrp3 is a homogue of adipocyte complement related protein (ACR930) and contains a collagen-like domain comprising Gly-Xaa-Aaa or Gly-Xaa-Pro repeats, and a C-terminal Clq domain comprising 10 beta-strands. The zacrp3 gene is collagen-like domain comprising 10 beta-strands. The zacrp3 gene is contained by the contained stranger or class or carp3 cacrp3 polypeptides, cacrp3-specific antibodies, expression constructs and host cells comprising zacrp3 under constructs and host cells comprising tacrp3 and its agonists and energy balance in the study and modulation of cellular metabolism and energy balance in cacrp3. Human zacrp3 and sacrp3-containing fusion proteins may be useful canorexia, and conditions associated with these disorders but to its Clq like domain, zacrp3 and zacrp3-containing fusion proteins may be useful as antimicrobial agents, promoting lysis or phagocytosis of infectious corganisms such as bacteria or viruses. Zacrp3, its fragments, fusion proteins and solutions and activity modulators may also be used to inhibit collagen-induced platelet aggregation, adhesion, or activation, and may therefore have potential for promoting blood flow within the vasculature of a mammal e.g., to treat injury to the vasculature or other collagenous collagents and all injury collagence represents cDNA concains the constants of the present sequence represents cDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel zacrp3 polypeptides used to treat or prevent bacterial or viral infections, for wound healing, improving blood flow, and to analyze energy efficiency in mammals -
                                                                                                                                   Human zacrp3; adipocyte complement related protein homologue; ACRP30; Clq domain; collaqen-like domain; energy balance modulation; cellular metabolism; metabolism; metabolism; anorexia antimicrobial agent; infection; platelet aggregation inhibition; adhesion; activation; vascular injury; antibacterial; antiviral; ss.
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Pred. No. 0;
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Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          encoding human zacrp3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-665243/64.
P-PSDB; AAB29580.
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Best Local Similarity
Matches 1696; Conserv
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RESULT 3

	Db 1201 TATAACATT Qy 1269 CTAGCTGCC	1261	1321	Oy 1389 ATAGATTTT Db 1381 ATAGATTTT	1449	Oy 1509 TCATAAATA 1501 TCATAAATA	Oy 1569 AGGATTTT 	Qy 1629 CTGGCTTTA 	Qy 1689 ACCTTGTT 	RESULT 4 AAF93874 ID AAF93874 stand	XX AC AAF93874; XX DT 23-MAY-2001 (XX DE Human cDNA enc XX KW Human; secreto		EP1067182-A2.	PF 07-JUL-2000; 2 XX PR 08-JUL-1999; PR 11-JAN-2000; 2	02-MAY-2000; . (HELI-) HELIX	PI Ota T, Isogai XX DR WPI; 2001-0939: DR P-PSDB; AAB884	XX PT Nucleic acids (PT gene therapy o
Db 61 TGAGAATCATGCTTTGGAGCAGCTCATCTATTGGCAACTGCTGGCTTTGTTTTTCCTCC 120 Qy 129 CTTTTTGCCTGTGTGAAGATGATGATGATGATGATGATGAACCGGAGGACTACCCCCAG 188	Db 121 CTTTTGCCTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACTACCCCCCAG 180 Qy 189 ACTGCAGTAAGTGTTGTCATGGAGACTATCGAGGCTACCAAGGCCCCCTGGGC 248	181 ACTGCAGTAAGTGTTGTCATGGAGACTACAGGCTTTCGAGGCTACCAAGGCCCCCCTGGGC 24	Qy 249 CACCGGGCCTCCTGGCATTCCAGGAAACCATGGAACAATGGCAACAATGGAGCCACTG 308 	QY 309 GTCATGAAGGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGCCTCGAGGGGAC 368	Qy 369 GGGGCAGCATGGCCCCAAAGGAGAAAGGGCTACCCGGGGATTCCACCAGAACTTCAGA 428	Qy 429 TTGCATTCATGGCTTCTCTGGCAACCCACTTCAGCAATCAGAACAGTGGGATTATCTTCA 488	Qy 489 GCAGTGTTGAGACCATTGGAACTTCTTGATGTCATGACTGGTAGATTTGGGGCCC 548	Qy 549 CAGTATCAGGTGTATTTCTTCACCTTCAGGAGGCATGAGGATGTTGAGGAG 608	Qy 609 TGTATGTGTACCTTATGCACAATGGCAACAGTCTTCAGCATGTACAGCTATGAATGA	Qy 669 AGGCCAAATCAGATACATCCAGCAATCATGCTGAAGCTAGCCAAAGGGATGAGG 728	QY 729 TITGCTGCGAATGGCCATGGCGTTCTCCATGGGGACCACCACGTTTTCACTTG 788	Qy 789 CAGGATTCCTGCTCTTTGAAACTAAGTAAATATGACTAGAATAGCTCCACTTTGGGA 848 	QY 849 AGACTIGTAGCTGATTTGTTACGATCTGAGGAACATTAAAGTTGAGGGTTTTACA 908 	Qy 909 TTGCTGTATTCAAAAAATTATTGGTTGCAATGTTGTCACGCTACAGGTACACCAATAAT 968	QY 969 GTTGGACAATTCAGGGGCTCAGAAGAATCAACCACAAAATAGTCTTCTCAGATGACCTTG 1028	Qy 1029 ACTAATACTCACCATCTTTATCACTCTTTCCTTGGCACCTAAAAGATAATTCTCCTCT 1088	QY 1089 GACGCAGGTTGGAATATTTTTGTATCACAGAAGTCATTTGCAAAGATTTTGACTAC 1148 	Qy 1149 TCTGCTTTTAATTTAATACCAGTTTTCAGGAACCCCTGAAGTTTTAAGTTCATTATCTT 1208

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TAGCTATAAAGTGCTTGACCAGTAATGTGGTTGTAATTTTGTGTATGTTCCC 1448
                                                                                                                                                                                                                           TAATTTAATACCAGTTTTCAGGAACCCCTGAAGTTTTAAGTTCATTATTCTT 1200
                                                                                                                                                                                                                                                                                                                                            encoding secretory proteins/membrane proteins, useful in or as candidate target molecules in drug development \,\cdot\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  coding a membrane or secretory protein clone PSEC0232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ory protein; membrane protein; vaccine; gene therapy; thritis; diabetes; ss.
                                                                         CTTATTAGCTAATTTAGTGCCCTCCGTGTTCAGCTTAGCCTTTGACCCTTTC
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2000JP-0118775.
2000JP-0183766.
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3447.
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This invention relates to nucleic acid sequences AAF93744 - AAF93916
which encode human secretory or membrane proteins represented by
AAB88137 - AAAB8419. Included in the invention are primers
CAAP3917 - AAAB8419. Included in the invention are primers
CAAP3917 - AAAB88419. Included in the invention are primers
CAAP3917 - AAAB88419. Included in the invention are primers
CCAAP3917 - AAAB88419. Included in the invention also includes methods for
CCCAAP4 sequences of the invention. The invention also includes methods for
CCCAAP4 sequences may included in vaccines. The polynuclectics and the
CCCAAP4 sequences may be used in vaccines. The polynuclectide sequences
CCCAAP4 sequences may be used in the prevention, treatment and
CAB990818 of diseases associated with inappropriate secretory
CCCAAP4 sequences may also be used as DNA probes in diagnostic assays
CCCAAP4 sequences may also be used as DNA probes in diagnostic assays
CCCAAP4 sequences may also be used and therefore in metabolism. The polypeptides may also be
CCCAAP4 sequences and their role in metabolism. The polypeptides may be used
CACAP4 as antigens in the production of antibodies against them and in assays to
CACAP4 in metabodies and antagonists of expression and
CACAP4 as alloganists and antagonists of expression and
CACAP4 as alloganistic agents for detecting the presence of there
CCCAPAFE in an anaples (e.g. by enranged include rheumatoid
CACAP4 in samples (e.g. by errayme linked immunosorbant assay
CCCAPAPAFE in a samples (e.g. by errayme linked immunosorbant assay 261; 609pp + CD ROM; English arthritis and diabetes. SEQ ID

T; 0 other; G; 476 Sequence 1709 BP; 480 A; 363 C; 390

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180 240 252 300 312 360 372 420 432 480 492 540 9 GGCATCTGCCCGAGGAGACCACCTCCTGGAGCTCTGCTGTCTTCTCAGGAGACTCTGA 60 Gaps GGCATCTGCCCGAGGAGACCACGCTCCCGGAGCTCTGCTGTCTTCTCAGGGAGACTCTGA 72 GCCTCTGTTGAGAATCATGCTTTGGAGGCAGCTCATCTATTGGCAACTGCTGGCTTTGTT TITCCICCTITITIGCCIGIGICAAGAIGAAIACAIGGAGICICCACAAACCGGAGGACI CCCTGGGCCCACCGGGCCCTCCTGGCATTCCAGGAAACCATGGAAACAATGG AGCCACTGGTCATGAAGGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGCCTCG AGGGGAGCGGGGCAGCATGGCCCCAAAGGAGAAGGGCTACCCGGGGATTCCACCAGA ACTTCAGATTGCATTCATGGCTTCTCTGGCAACCCACTTCAGCAATCAGAACAGTGGGAT ACCCCCAGACTGCAGTATGTCATGGAGACTACAGCTTTCGAGGCTACCAAGGCCC ACTICAGATICCATICATICGUTTCTGGCAACCCACTICAGCAATCAGAACAGTGGGAT TATCTTCAGCAGTGTTGAGACCAACATTGGAAACTTCTTTGATGTCATGACTGGTAGATT TGGGGCCCCCAGTATCAGGTGTGTATTTCTTCACCTTCAGCATGATGAGGATGT DB 22; Length 1709; ö 1; Indels Score 1695.4; Pred. No. 0; 0; Mismatches Ouery Match Best Local Similarity 99.9%; Matches 1696; Conservative 13 73 121 133 181 61 193 241 253 301 313 361 373 421 433 481 493 541 553 ô qq δ a à g ò QQ à a ò q ò qq ò q ò g õ g

1020 1032 1152 1080 672 732 780 792 840 852 900 912 960 972 CCAATAATGTTGGACAATTCAGGGGCTCAGAAGAATCAACCACAAAATAGTCTTCTCAGA 613 TGAGGAAGTGTATGTACCTTATGCACAATGGCAACACAGTCTTCAGCATGTACAGCTA TGAAATGAAGGGCAAATCAGATACATCCAGCAATCATGCTGTGCTGAAGCTAGCCAAAGG GGATGAGGTTTGGCTGCGAATGGGCAATGGCGCTCTCCATGGGGACCACCAACGCTTCTC CACCTTTCCAGGATTCCTGCTCTTTGAAACTAAGTAAATATATGACTAGAATAGCTCCAC TTTGGGGAAGACTTGTAGCTGAGCTGATTTGTTACGATCTGAGGAACATTAAAGTTGAGG GTTTTACATTGCTGTATTCAAAAATTATTGGTTGCAATGTTGTTCACGCTACAGGTACA TGACCTTGACTAATATACTCAGCATCTTTATCACTCTTTCCTTGGCACCTAAAAGATAAT TGACCTTGACTAATATACTCAGCATCTTTATCACTCTTTCCTTGGCACCTAAAAGATAAT TTATTCTTTATAACATTTGAGAGAATCGGATGTAGTGATATGACAGGGCTGGGGCAAGAA CAGGGGCACTAGCTGCCTTATTAGCTAATTTAGTGCCCTCCGTGTTCAGCTTAGCCTTTG 1273 CAGGGGACTAGCTGCCTTATTAGCTAATTTAGTGCCCTCCGTGTTCAGCTTAGCTTTG TCTCCTCTGACGCAGGTTGGAAATATTTTTTTTTTTTCACAGAAGTCATTTGCAAAGAATT TTGACTACTCTGCTTTTAATTTAATACCAGTTTTCAGGAACCCCTGAAGTTTTAAGTTCA TAAAGTCAATAGATTTTAGCTATAAAGTGCTTGACCAGTAATGTGGTTGTAATTTTGTGT ATGTTCCCCCACATCGCCCCCAACTTCGGATGTGGGGTCAGGAGGTTGAGGTTCACTATT ATGTTCCCCCACATCGCCCCCAACTTCGGATGTGGGGTCAGGAGGTTGAGGTTCACTATT AACAAATGTCATAAATATCTCATAGAGGTACAGTGCCAATAGATATTCAAATGTTGCATG **ATTTTGACCTGGCTTTAGATAAAACTGTGGCAAGAAAATGTAATGAGCAATATATGGAA** 841 853 1033 661 721 733 781 901 961 1021 1081 1093 1141 1153 1201 1213 1261 1321 1381 1393 1441 1453 1501 1561 1573 1621 1633 1333 1513 g qq g q Dρ ò ò ò q δ 셤 ò g q qq g ò ò ò οy ò ò g δ g ò Dp ò g õ QQ á ò g

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                                                                           AAI99523 standard; cDNA; 1620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to novel human polynucleotides (AA199513-AA199538) and the encoded proteins (AAM99915-AAM99914) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthits and ulcerative collitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases c.g. cerebral anoxia and epilepsy; and (f) infectious diseases such as viral, bacterial, fungal and parasitic infections.

Where: The sequence data for this patent did not form part of the printed specification, but was oblained in electronic format directly from MIPO at ftp. wipo.int/pub/published_pct_sequences.
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Pred. No. 0;
3; Mismatches 2; Indels 0;
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                                                                                                                                                                                                                                                                                                                                                                               New nucleic acids and polypeptides, useful for ameliorating human disorders and diseases \mbox{\, -}
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             2000US-0249264.
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                                                                                                                                   1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system: CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokantic; thrombolytic; drug screening; arthritis; inflammation;
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                                                                                                                                                                                                                   Ren F,
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Yang Y,
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u C, Xue AJ,
Drmanac RT;
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Wang Z, Wehrman T, X
Zhou P, Goodrich R,
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                                                             for receptor activity, arthritis and inflammation,
                                                                                                     data for this patent did not form part
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Pred. No. 0;
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                                                                                                                                                                541 A; 352
                                                                                                                                                                                                  Query Match 90.5%;
Best Local Similarity 99.7%;
Matches 1551; Conservative
                                                                                                     Note: The sequence specification.
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:t= "Human protein having hydrophobic domain"
"CDS is specifically is claimed in claim 3"
     CAGGAACCCCTGAAGTTTTAAGTTCATTATTCTTTAAACATTTGAGAGAATCGGATGTA
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The present sequence is human protein with hydrophobic domain encoding cDNA clone HP10781. The polynucleotide and polypeptide of the invention amay be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The polynucleotides associated with inappropriate polypeptide expression. The polynucleotides into a host cell and culturing the cell to express the protein. The polynucleotides and its complementary sequences may also be used as DNA probes in diagnostic assays and also used in gene therapy. The polypeptides may also be used as antigens in the production of antibodies only in assays to identify modulators of polypeptide expression and activity. The polypeptides and nucleic acids may be used as nutritional supplements, to modulate cytokine and cell proliferation activity, to modulate cytokine and cell proliferation activity, to modulate tissue growth activity (e.g. for the treatment of parkinson's disease, Huntington's disease, and Alzheimer's disease), to modulate activin and inhibin activity (e.g. for controlling fertility), to modulate chemotactic and chemokinetic activity, to modulate activity activity to modulate chemotactic and chemokinetic activity, to modulate activity activity, to modulate chemotactic and chemokinetic activity, to modulate activity activity, to modulate activi
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                                         "Mature human protein with hydrophobic domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human proteins with hydrophobic domains and the nucleic acids encoding them, useful for preventing diagnosing and treating e.g. cancer, Alzheimer's and inflammation
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Human; secreted protein; gene; ss; nutritional supplement; haemophilia; viral infection; bacterial infection; fungal infection; diabetes; asthma; autoimmune disorder; rheumatoid arthritis; multiple sclerosis; tumour; autoimmune thyroiditis; allergic reaction; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; liver fibrosis; cancer; ulcer; coagulation disorder; inflammatory disorder; crohn's disease; incision; tissue regeneration; wound healing; burn; haematopolesis; myeloid cell deficiency; lymphoid cell deficiency.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Five hundred and ninety two polynucleotides derived from a variety of human tissue sources which encode secreted proteins, useful for treating immune deficiencies and disorders such as autoimmune disorders
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TTAATAATACCTTAGAGAAAGATTTTGACCTGGCTTTAGATAAAACTGTGGCAAGAAAA
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JR;
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Graham
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The invention relates to 592 polynucleotides which have been derived from a variety of human tissue sources and which encode novel secreted proteins. The polynucleotides can be used as probes for the identification and isolation of full length cDNA and genomic DNA. The polynucleotides and proteins can also be used as nutritional supplements. The proteins are useful in the treatment of various immune deficiencies and disorders such as viral infections, bacterial infections, fungal infections, autoimmune disorders (e.g. rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis and diabetes) and allergic reactions and conditions (e.g. asthma). They are also useful for treating neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), liver fibrosis, coaquiation disorders (e.g. haemophilia), inflammatory disorders (e.g. Crohn's disease) and tumours. They are also

Claim 1; Page 261-262; 372pp; English.

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useful for tissue regeneration, for wound healing and in the treatment of burns, incisions and ulcers. The proteins are also useful for regulating haematopoiesis and for treating myeloid or lymphoid cell deficiencies. Sequences ABK34863-ABK35454 represent polynucleotides of the invention.
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2000US-055217.
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2000US-0620112.
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Wang 2, W
Zhou P,
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03-AUG-2000; 2
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Wang J, 1
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                                                          The invention relates to human nucleic acids (AA157798-AA161369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, computeressant and exposition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous coststem, such as peripheral nervous system, such as peripheral nervous system diseases, such as comparable and central nervous system diseases, such as contained neuropathies and central nervous system diseases, such as contained relateral solerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, contilisation of the activity, chemotactic/chemoKinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, consays for receptor activity, arthritis and inflammation, leukaemias and constitution that the sequence data for this contained the contained the contained contained contained contained contained the contained containe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 22; Length 1799
                                                                                                                                                                                                                                                                                                                                                                                                             95;
                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                  531 A; 389 C; 344 G; 535 T; 0 other;
               for
            useful
                                                                                                                                                                                                                                                                                                                                                                             Score 1295.4;
Pred. No. 0;
0; Mismatches
               polypeptides, us
system injuries
                                                                                                                                                                                                                                                                                                                                                                               75.7%;
93.6%;
                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 93.6
Matches 1401; Conservative
              ucleic acids and
central nervous
                                                                                                                                                                                                                                                                                                                                                  Sequence 1799 BP;
               nucleic
                                                                                                                                                                                                                                                                                                                    specification
                                                                                                                                                                                                                                                                                                                                                                               Query Match
                             as
                             such
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                                                                                                                                                                                                                                                                                                                                                                                                      GGATGTAGTGATATGACAGGGCTGGGGCAAGAACAGGGGGCACTAGCTGCCTTATTAGCTA 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTTAGTGCCCTCCGTGTTCAGCTTAGCCTTTGACCCTTTTCCTTTTGATCCACAAAATAC 1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGATGTGGGGTCAGGAGGTTGAGGTTCACTATTAACAAATGTCATAAATATCTCATAGAG 1527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTACAGTGCCAATAGATATTCAAATGTTGCATGTTGACCAGAGGGATTTTATATCTGAAG 1587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACATACACTATTAATAAATACCTTAGAGAAAGATTTTGACCTGGCTTTAGATAAAACTG 1647
                                                                                                                                                                                                                                                                                                     840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy;
                                                                                   TITITCTATCACAGAAGICATTTGCAAAGAATTTTGACTACTCTGCTTTTAATTAATAC
                                                                                                                                                                                                                                                                                                                                                       TGCTTGACCAGTAATGTGGTTGTAATTTTGTGTATGTTCCCCCACATCGCCCCAACTTC
                                                                                                                                     CAGAAGAATCAACCACAAAATAGTCTTCTCAGATGACCTTGACTAATATACTCAGCATCT
                                                                                                                                                                                                   TTATCACTCTTTCCTTGGCACCTAAAAGATAATTCTCCTCTGACGCAGGTTGGAAATATT
                                                                   ATTGGTTGCAATGTTGTTCACGCTACAGGTACACCAATAATGTTGGACAATTCAGGGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for DNA encoding secretory/membrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; secretory protein; membrane protein;
rheumatoid arthritis; diabetes; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF94076 standard; DNA; 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Primer specific
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313 AGCCACTGGTCATGAAGGACCCAAAGGTGAGAAGGCGGACAAAGGTGACCTGGGGCCTCG 372

373 AGGGGAGCGGGGCAGCATGGCCCCAAAGGAGAAAGGCTACCCGGGGATTCCACCAGA

361

ACTTCAGATTGCATTCATGGCTTCTCTGGCAACCCACTTCAGCAATCAGAACAGTGGGAT

480

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This inventor islates to nuclear actu sequences ARF3910

AAPB817 - AAB88419. Included in the invention are primers

AAPB817 - AAB88419. Included in the invention are primers

CC AAF89317 - AAF89425 and AAF62223 - AAF62235 which are used to isolate the

CC CDNA sequences of the invention. The invention also includes methods for

the production of antibodies directed against the proteins, and CDNA

Sequences, which can be used in vaccines. The polynucleotide sequences

CC can be used in gene therapy. The polynucleotide sequences

CC proteins they encode may be used in the prevention, treatment and

diagnosis of diseases associated with inappropriate secretory

protein/membrane protein expression. The nucleic assays

CC diagnosis of diseases associated with inappropriate secretory

protein/membrane protein expression. The nucleic assays

CC (e.g. polymerase chain reactions (PCR)) to detect and quantitate the

sequences may also be used as DNA probes in diagnostic assays

CC (e.g. polymerase chain reactions (PCR)) to detect and quantitate the

cused to study the expression and function of secretory proteins/membrane

polypeptides and their role in metabolism. The polypeptides may be used

as antigens in the production of antibodies against them and in assays to

identify modulators (agonists and antagonists) of expression and

activity. The antibodies and antagonists may also be used as therapeutic

agents to down regulate expression and activity. The antibodies may also

be used as diagnostic agents for detecting the presence of the

CE ISTINA Examples of diseases which may be treated include rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                     Nucleic acids encoding secretory proteins/membrane proteins, useful in gene therapy or as candidate target molecules in drug development -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention relates to nucleic acid sequences AAF93744 - AAF93916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGCATCTGCCCGAGGAGCCACGCTCCTGGAGCTCTGTTCTTCTCAGGGAGACTCTGA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13 GCCATCTGCCCAGGAGCCACGCTCCCGGAGCTCTGCTGTTCTCTCAGGAGACTCTGA 72
                                                                                                                                                                                                                                                          χ.
                                                                                                                                                                                                                                                          Hayashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                          Sugiyama T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 810 BP; 200 A; 201 C; 218 G; 188 T; 3 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.3e-212;
                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; SEQ ID 510; 609pp + CD ROM; English.
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Pred. No. 1.3e-
0; Mismatches
                                                                                                                                                                                                                                                          Kawai Y,
                                                                                                                                                                                                                                                          Ota T, Isogai T, Nishikawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44.8%;
98.9%;
                                                                                                              08-JUL-1999; 99JP-0194179.
11-JAN-2000; 2000JP-0118775.
02-MAY-2000; 2000JP-0183766.
                                                                  07-JUL-2000; 2000EP-0114090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 791; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   arthritis and diabetes.
                                                                                                                                                                                                           (HELI-) HELIX RES INST
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                     Nucleic acids
                      10-JAN-2001
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720

ABK35591 standard; DNA; 741 BP.

RESULT 11 ABK35591 (first entry)

08-MAY-2002

ABK35591;

791 CACCTTTGCAGGATTCCTGC 810

CACCTTTGCAGGATTCCTGC

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672

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541 TGGGGCCCCCAGTATCAGGTGTGTATTTCTTCACCTTCAGCATGATGAAGCATGAGGATGT

TGAGGAAGTGTATGTGTACCTTATGCACAATGGCAACACAGTCTTCAGCATGTACAGCTA

601

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inflammatory disorder; memological disorder; haematopoletic disorder; skeletal developmental disorder; growth abnormality; autoimmune disorder; skeletal developmental disorder; growth abnormality; autoimmune disorder; perioder; nervous system disorder; bacterial infection; peripheral myelinopathy; viral infection; concer; obesity; diabetes; hypotension; sexual development disorder; blood disorder; gene; ds.
Gene encoding novel human secreted or membrane-associated protein #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Strum JC;
                                                              Human; secreted protein; membrane-associated protein; hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rizvi SK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Martensen SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lai Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-JUL-2001; 2001WO-US21985.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-JUL-2000; 2000US-218033P.
21-AUG-2000; 2000US-226517P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-188468/24
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                                                                                                                                                                                                                                                                                        Homo sapiens
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121 133 181 193

oy oy AGCCACTGGTCATGAAGGAGCCAAAGGTGAGAAGGCGACAAAGGTGACCTGGGGCCTCG 360

us-10-036-041-1.rng

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Novel secreted and membrane-associated polypeptides and polynucleotides encoding the polypeptides, for preventing, treating and ameliorating cancers, mental or sexual developmental disorders, and malignant tumours
                                                                                                                        The present invention relates to the isolation of novel human secreted or membrane-associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. asthma), neurological disorders (e.g. dementia), haematopoietic disorders, skeletal developmental disorders, growth abnormalities, neurodegenerative disorders (e.g. Huntington's disease), nervous system disorders, autoimmune disorders (e.g. rheumatoid arthritis), peripheral myelinopathies, viral and bacterial infections, alpha-mannosidosis, diabetes, cancers, malignant tumours, hyper- and hypotension, obesity, bulimia, annorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental or sexual development disorders, and dysfunctions of the blood cascade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                               system including those leading to stroke. ABK3582-ABK35609 represent the genes encoding the novel human secreted or membrane-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGCTTTGGAGGCAGCTCATCTATTGGCAACTGCTGGCTTTGTTTTTCCTCCCTTTTTTGC 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 741 BP; 191 A; 178 C; 200 G; 172 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43.3%; Score 741; DB 24; L
llarity 100.0%; Pred. No. 3.7e-205;
Conservative 0; Mismatches 0;
                                                                                          Claim 2; Page 106; 151pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   proteins of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             t Local Sin
ches 741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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The present polynucleotide encodes a polypeptide which is expressed in mammalian skin cells. The polypeptide is useful for stimulating keratinocyte growth and motility, inhibiting the growth of cancer cells, modulating angiogenesis, inhibiting angiogenesis and vascularisation of tumours, modulating skin inflammation, stimulating the growth of epithelial cells, inhibiting the binding of human immunodeficiency virus (HIV)-1 to leukocytes, and treating inflammantony disease, cancer and neurological diseases. The polynucleotide can be used as a marker, in the identification of genetic disorders, and for the design of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JG;
             107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATCTATTGGCAACTGCTGGCTTTGTTTTTCCTCCTTTTTGCCTGTGTCAAGATGAAT 152
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated polynucleotide used in the identification of genetic disorders and encoding polypeptides used for treating inflammatory
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                                                                                                                                                                                                                                                                           Rat; skin cell; cytostatic; antlinflammatory; antl-HIV; noctropic; neuroprotective; vulnerary; immunomodulatory; vaccine; keratinocyte growth stimulation; cancer; anglogenesis inhibition; inflammation; neurological disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40.7%, Score 696.2; DB 22; Length 1035; 82.8%; Pred. No. 5.1e-192;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 317-318; 352pp; English.
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                                                                                                                                                            BP.
                                                                                                                                                                                                                                                 Skin cell cDNA, SEQ ID NO: 424
                                                        CTGCTCTTTGAAACTAAGTAA 817
                                                                                                                                                           AAC99776 standard; cDNA; 1035
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                                                                        CTGCTCTTTGAAACTAAGTAA
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819; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Watson JD, Strachan L,
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Human; rat; mouse; skin cell; skin wound; cancer; growth defect;
developmental defect; inflammatory disease; dermatological; vulnerary;
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 ACATGGAGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGTAAGTGTTGTCATGGAG
         CCCACTTCAGCAATCAGAACAGTGGGATTATCTTCAGCAGTGTTGAGACCAACATTGGAA
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                                                                            GAAACCATGGAAACAATGGCAACAATGGAGCCACTGGTCATGAAGGAGCCAAAGGTGAGA
                                                                                              GAAACCATGGAAACAATGGAAATAACGGAGCCACTGGCCACGAAGGGCCCAAGGGTGAGA
                                                                                                                   AGAAGGGCTACCCGGGGATTCCACCAGAACTTCAGATTGCATTCATGGCTTCTCTGGCAA
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The present invention provides the protein and coding sequences of CDNAs isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins have important roles in the induction of hair growth, cell proliferation and cell-cell interaction, in maintaining tissue integrity, in wound healing and in modulating immune responses. The present sequence is a cDNA of the invention.
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  gene;
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                                                                                                                                                                                                           Kumble
                                                                                                                                                                                                                                                          New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93 TCATCTATTGGCAACTGCTGGCTTTGTTTTCCTCCCTTTTTGCCTGTGTCAAGATGAAT
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 neuroprotective;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40.7%; Score 696.2; DB 24; Length 1035; 82.8%; Pred. No. 5.1e-192; Live 0; Mismatches 168; Indels 2;
                                                                                                                                                                                                           JG,
                                                                                                                                                                                                           Murison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1035 BP; 255 A; 242 C; 298 G; 240 T; 0 other;
anti-inflammatory; cytostatic;
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                                                                                                                                                                                                         Sleeman M,
                                                                                                                                                                                 (GENE-) GENESIS RES & DEV CORP LTD
                                                                                                                                                                                                                                                                                                                            Claim 1; Page 262; 466pp; English.
                                                                                                                                        2000US-206650P
2000US-221232P
                                                                                                              24-MAY-2001; 2001WO-NZ00099
                                                                                                                                                                                                                                                                                                     modulating immune responses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 40.7%
Best Local Similarity 82.8°
Matches 819; Conservative
                                                                                                                                                                                                         Strachan L,
                                                                                                                                                                                                                                WPI; 2002-122020/16.
immunomodulator;
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25-JUL-2000;
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                                                       CTCACTTCAGCAATCAGAACAGTGGCATTATCTTCAGCAGTGTTGAGACCCAACATTGGAA
                   ACTTCTTTGATGTCATGACTGGTAGATTTGGGGCCCCCAGTATCAGGTGTGTATTTCTTCA
                             GCAACACAGTCTTCAGCATGTACAGCTATGAAATGAAGGGCAAATCAGATACATCCAGCA
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                                                                                                                                                                                                                                                                                             GTTGCAATGTTGTTCACGCTACAGGTACACCAATAATGTTGGACAATTCAGGGGCTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA encoding rat skin cell secreted protein, SEQ ID NO:28.
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98US-0188930.
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dermal papilla, human keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocytes tem cells and transit amplifying cells. Polypeptides of the invention may be used to transit amplifying cancer and neurological diseases. The proteins may be used to stimulate the growth and motility of keratinocytes, to inhibit the growth of cancer cells, to modulate angiogenesis and tumour vascularisation, to modulate skin inflammation, to modulate epithelial cell growth and to inhibit binding of HIV-1 to leukocytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences Azdiofo-z61832 represent cDNA sequences derived from several mouse, rat or human skin cell types. Sequences carived from several mouse, rat or human skin cell types. Sequences arived from several mouse, rat or human skin cell types. Sequences arived from several mouse, sacing sequence, indicating that the proteins are secreted. Sequences Azdiofos. 261669, Azdiofos-z61780, Azdiofos-z61817 and AAZGING2-z61817
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 treatment of
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0; Mismatches 168;
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                                             Page 73; 235pp; English.
polynucleotides useful
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cDNA encoding rat skin cell secreted protein, SEQ ID NO:203. BP AAZ61730 standard; cDNA; 1123 (first entry) 27-MAR-2000 AAZ61730; RESULT 15 AAZ61730

cell; Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast; embryonic skin cell; keratinocyte stem cell; transit amplifying cell secreted; transmembrane; inflammation; cancer; neurological disease; angliogenesis; tumour vascularisation; growth disorder; developmental disorder; skin wound; hair follicle disorder; anti-inflammatory; cytostatic; neuroprotective; vulnery; ss.

99WO-NZ00051 WO9955865-A1 29-APR-1999; 29-APR-1998; 04-NOV-1999 Rattus

98US-0069726 98US-0188930 09-NOV-1998

(GENE-) GENESIS RES & DEV CORP LTD.

for the treatment of various conditions polynucleotides useful Novel polynucleotides useru. including wounds and cancer WPI; 2000-072177/06 P-PSDB; AAY76025

Claim 1; Page 137; 235pp; English.

JG;

Murison

Onrust R, Kumble A,

Watson JD,

Sleeman M,

Strachan L,

The invention relates to novel nucleic acid sequences derived from rat dermal papilla, human keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocyte stem cells and transit amplifying cells. Polypeptides of the invention may be used to treat inflammation, the growth and moutility of keratinocytes, to inhibit the growth of cancer and neutility of keratinocytes, to inhibit the growth of cancer cells, to modulate angiogenesis and tumour vacularisation, to modulate skin inflammation, to modulate epithelial cell growth and to

inhibit binding of HIV-1 to leukocytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences AA261606-261832 represent cDNA sequences derived from several mouse, rat or human skin cell types. Sequences AA261765-261765, AA261801-3nd AA261806-261649, AA261725-261765, AA261802-261811-3nd AA26182 encode proteins with an N-terminal signal sequence, indicating that the proteins are secreted. Sequences AA261650-261668, AA261766-261780, AA261812-261817 and AA261829 encode proteins with one or more putative transmembrane domains. 82888888888888

Sequence 1123 BP; 277 A; 266 C; 321 G; 258 T; 1 other;

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212 375 136 CCCATCAGCTTCCCCGGGGAGATTCTGCCGATTTGTCACGAGCCATGCTCAGGAGGCAGC 195 152 255 315 272 332 435 392 495 452 555 512 615 Gaps 92 TCATCTATIGGCAACTGCTGGCTTTGTTTTTCCTCCCTTTTTGCCTGTGTCAAGATGAAT CTCTGCTGTCTTCTCAGGGAGACTCTGAGGCTCTGTTGAGAATCATGCTTTGGAGGCAGC ACATGGAGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGTAAGTGTTGTCATGGAG 213 ACTACAGCTTTCGAGGCTACCAAGGCCCCCTGGGCCACCGGGCCCTCCTGGCATTCCAG GAAACCATGGAAACAATGGCAACAATGGAGCCACTGGTCATGAAGGAGCCAAAGGTGAGA **AAGGAGACAAAGGCGACCTGGGGCCTCGAGGGGAACGGGGGCAGCATGGCCCCAAAGGAT** CCCACTTCAGCAATCAGAACAGTGGGATTATCTTCAGCAGTGTTGAGACCAACATTGGAA AGAAGGGCTACCCGGGGATTCCACCAGAACTTCAGATTGCATTCATGGCTTCTCTGGCAA 5 DB 21; Length 1123; Indels Score 696.2; DB 21; Pred. No. 5.3e-192; 0; Mismatches 168; 40.7%; Query Match
Best Local Similarity 82.8°
Matches 819; Conservative 33 93 153 316 273 436 496 333 393 556 453 ģ g ò ô δ g δ g ò g ò g ò QQ δ g

675 632 735 692 752 812 915 CCTTCAGCATGATGATGATGTTGAGGAAGTGTATGTGTATCCTTATGCACAATG GCAACACAGTCTTCAGCATGTACAGCTATGAAATGAAGGGCAAATCAGATACATCCAGCA ATCATGCTGTGCTGAAGCTAGCCAAAGGGGATGAGGTTTGGCTGCGAATGGGCAATGGCC CICTCCATGGGGACCACCAACGCTTCTCCACCTTTGCAGGATTCCTGCTCTTTGAAACTA 573 753 9/9 633 736 693 964 856 g Ωp _. සි ò οŽ δ d δ g ò

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                                                                       932 GITGCAATGTTGATGCTACAGGTACACCAATAATGTTGGACAATTCAGGGGCTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rat; skin cell; cytostatic; antiinflammatory; anti-HIV; nocobrotective; vulnerary; immunomodulatory; vaccine; keratinocyte growth stimulation; cancer; anglogenesis inhibition; inflammation; neurological disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33 CTCTGCTGTTTTCTCAGGGAGACTCTGAGGCTCTGTTGAGAATCATGCTTTGGAGGCAGC
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                                                                                                                                                                                     1095 AGAATAGACCACAAGGTAATATTCCCAGA 1123
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                                                                                                                                                                                                                                                                                                                        AAC99566 standard; cDNA; 1123
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P-PSDB; AAB55908.
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Human; rat; mouse; skin cell; skin wound; cancer; growth defect;
developmental defect; inflammatory disease; dermatological; vulnerary;
immunomodulator; anti-inflammatory; cytostatic; neuroprotective; gene;
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                                                                                                                                                                                GCAACACACTCTTCAGCATGTACAGCTATGAAATGAAGGGCAAATCAGATACATCCAGCA
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CCCACTTCAGCAATCAGAACAGTGGGATTATCTTCAGCAGTGTTGAGACCAACATTGGAA
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2000US-221232P.
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developmental
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            nootropic; neuroprotective; vulnerary; immunomodulatory; vaccine; keratinocyte growth stimulation; cancer; angiogenesis inhibition; inflammation; neurological disease; ss.
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Pred. No. 5.3e-192;
); Mismatches 168; Indels 2;
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cytostatic; antiinflammatory;
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82.8%;
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Best Local Similarity
Matches 819; Conserv
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skin cell;
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                                                                                            isolated from human, murine and rate skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins have important roles in the induction of hair growth, cell proliferation and cell-cell interaction, in maintaining tissue integrity, in wound healing and in modulating immune responses. The present sequence is a
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New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
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                                                                                  present invention provides the protein and coding sequences
                                                                                                                                                                                                                                DB 24; Length 1123;
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                                                                                                                                                                                                        Sequence 1123 BP; 277 A; 266 C; 321 G; 258 T; 1 other;
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les 168;
                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                               Score 696.2;
Pred. No. 5.3
                                                           Claim 1; Page 86-87; 466pp; English.
                                                                                                                                                                                                                              40.7%;
ilarity 82.8%;
Conservative
                                       immune responses
                                                                                                                                                                                   the invention.
                                                                                                                                                                                                                                          Best Local Similarity
Matches 819; Conserv
                         growth and modulating
                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention provides the protein and coding sequences of cDNR isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the
                                                                                                                                               Human; rat; mouse; skin cell; skin wound; cancer; growth defect;
developmental defect; inflammatory disease; dermatological; vulnerary;
immunomodulator; anti-inflammatory; cytostatic; neuroprotective; gene;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              in modulating immune responses. The present sequence is a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
CCCTCCATGGGGACCACCAGGGCTTCTCTACCTTCGCAGGCTTTCTGCTTTTTGAAACTA
                                              TTACGATCTGAGGAACATTAAAGTTGAGGGTTTTACATTGCTGTATTCAAAAAATTATTG
                                                                                                                 976 TTAGGATCTGAGGGGTGTTGGAGTTG-GGCTTCTCTATGGAGTATTTAACTGTTACATTG
                               AGTAAATATATGACTAGAATAGCTCCACTTTGGGGAAGACTTGTAGCTGAGCT - GATTTG
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nes 168;
                                                                                                                                                                                                                                                                                                                                                                                                      Rat cDNA isolated from skin cells SEQ ID NO: 203
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                                                                                                                                                                                                                         Claim 1; Page 155-156; 466pp; English.
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                                                                                                                                                                                                                                                                                                               ABL34815 standard; cDNA; 1123
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              TCATCTATTGGCAACTGCTGGCTTTGTTTTTCCTCCCTTTTTGCCTGTGTAGATGAAT 152
                                                                                                  153 ACATGGAGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGTAAGTGTTGTCATGGAG 212
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CTCTGCTGTCTTCTCAGGGAGACTCTGAGGCTCTGTTGAGAATCATGCTTTGGAGGCAGC
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                                                               AGAATCAACCACAAAATAGTCTTCTCAGA 1020
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The invention relates to the human zacrp3 protein (AAB29580) and to nucleic acids which encode it (AAC64058, AAC64063). Zacrp3 is a homogue of adipocyte complement related protein (ACR930) and contains a collagen-like domain comprising Gly-Xaa-Xaa or Gly-Xaa-Pro repeats, and a collagen-like domain comprising IO beta-strands. The zacrp3 gene is carp3 to thromosome 5p12. The invention also relates to zacrp3 and a carp3 polypeptides, carp3. Specific antibodies, expression constructs and host cells carp3. Specific antibodies, and methods of recombinant production of cacrp3. Human zacrp3, and its agonists and antagonists may be used in the carp3 and may therefore be used to treat disorders such as obesity and modulation of cellular metabolism and energy balance in manmals, and may therefore be used to treat disorders such as obesity and anorexia, and conditions associated with these disorders. Due to its Clq anorexia, and conditions associated with these disorders may be useful cas antimicrobial agents, promoting lysis or phagocytosis of infectious organisms such as bacteria or viruses. Zacrp3, its fragments, fusion proteins, antibodies and activity modulators may also be used to inhibit collagen-induced platelet aggregation, adhesion, or activation, and may therefore have potential for promoting blood flow within the vasculature of a mammal e.g., to treat injuly to the vasculature or other collagenous cissue. Human zacrp3 and its antibodies may additionally be used to study dimerisation and oligomerisation. The present sequence represents DNA cenceding mouse zacrp2, a homologue of human zacrp3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel zacrp3 polypeptides used to treat or prevent bacterial or viral infections, for wound healing, improving blood flow, and to analyze
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72 GAATCATGCTTTGGAGGCAGCTCATCTATTGGCAACTGCTGGCTTTGTTTTTCCTCCCTT 131
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                                                                                                                                                    Mouse zacrp2; adipocyte complement related protein homologue; ACRP30; C1q domain; collagen-like domain; energy balance modulation; cellular metabolism; metabolic disorder; obesity; anorexia; antimicrobial agent; infection; platelet aggregation inhibition; adhealon; activation; ascular injury; antibacterial; antiviral; human zacrp3 homologue; ds.
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85.5%; Pred. No. 6.9e-192;
.ive 0; Mismatches 132; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 115-117; 123pp; English.
                                                                                                           Mouse zacrp2 DNA, SEQ ID NO:11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      energy efficiency in mammals
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Matches 786; Conservative
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RESULT 20 AAC64064 ID AAC6

AAC64064 standard; DNA; 1117

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                                                                                            TATCAGGTGTGTATTTCTTCACCTTCAGCATGAAGCATGAGGGATGTTGAGGAAGTGT
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                 GCAGTAAGTGTTGTCATGGAGACTACAGCTTTCGAGGCTACCAAGGCCCCCCTGGGGCCAC
                                                                   286 CAGGTCCTCCTGGCATTCCAGGAAACCATGGAAACAATGGGAACAATGGAGCTACTGGCC
                                                                                   ATGAAGGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGGCCTCGAGGGGGAGCGGG
                                                                                                                    GGCAGCATGGCCCCAAAGGAGAGAAGGGCTACCCGGGGATTCCACCAGAACTTCAGATTG
                                                                                                                                                     CATTCATGGCTTCTGGCAACCCACTTCAGCAATCAGAACAGTGGGATTATCTTCAGCA
                                                                                                                                                                                      GTGTTGAGACCAACATTGGAAACTTCTTTGATGTCATGACTGGTAGATTTGGGGCCCCCAG
                                                                                                                                                                                                                                                          ATGTGTACCTTATGCACAATGCCAACACAGTCTTCAGCATGTACAGCTATGAAATGAAGG
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                                                                                                                                                                                                                                                                                                           GAAAATCAGATACATCCAGCAACCATGCAGTGCTGAAGTTGGCCAAAGGAGATGAAGTCT
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The present invention relates to the isolation of novel human secreted or membrane-associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. ameliorating various diseases such as inflammatory disorders (e.g. asthma), neurological disorders (e.g. dementia), haematopoietic disorders, skeletal developmental disorders, growth abnormalities, neurodegenerative disorders (e.g. theuniquon's disease), nervous system of isorders, autoimmune disorders (e.g. rheumatoid arthritis), peripheral myelinopathies, viral and bacterial infections, hyper- and hypothersion, obesity, bulinia, anorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental or sexual development disorders, and dysfunctions of the blood cascade system including those leading to stroke. ABK35582-ABK35609 represent proteins of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secreted and membrane-associated polypeptides and polynucleotides ong the polypeptides, for preventing, treating and ameliorating s, mental or sexual developmental disorders, and malignant tumours
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cancer; obesity; diabetes;
blood disorder; gene; ds.
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  peripheral myelinopathy; viral infection;
hypotension; sexual development disorder;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Lai Y,
                                                                                                                                                                                                                                                                                                                                          (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LID.
                                                                                                                                                                                                                                                                   12-JUL-2000; 2000US-218033P.
21-AUG-2000; 2000US-226517P.
                                                                                                                                                                                                                    12-JUL-2001; 2001WO-US21985
                                                                                                                                                                                                                                                                                                                                                                                                                                            Cogswell JP, La
Gang Z, Xie Q;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 100.
Matches 659; Conservative
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                                                                                                                     WO200204600-A2
                                                                          Homo sapiens
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         TTGATGTCATGACTGGTAGATTTGGGGCCCCCAGTATCAGGTGTGTATTTCTTCACCTTCA
                                                                              GCATGATGAAGCATGATGTTGAGGAAGTGTATGTGTACCTTATGCACAATGGCAACA
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Human zacrp3 degenerate DNA, SEQ ID NO:10. (first entry) 19-FEB-2001

Human zacrp3; adipocyte complement related protein homologue;
ACRP30; C1q domain; collagen-like domain; energy balance modulation;
cellular metabolism; metabolism; anetabolism;
antimicrobial agent; infection; platelet aggregation inhibition;
adhesion; activation; vascular injury; antibacterial; antiviral; ds. 99US-0294943 19-APR-2000; 2000WO-US10454 WO200063377-A1. sapiens 20-APR-1999; 26-OCT-2000 Synthetic Ношо

Novel zacrp3 polypeptides used to treat or prevent bacterial or viral infections, for wound healing, improving blood flow, and to analyze energy efficiency in mammals -The invention relates to the human zacrp3 protein (AAB29580) and Claim 10; Page 115; 123pp; English.

Piddington CS, Bishop PD;

WPI; 2000-665243/64.

(ZYMO) ZYMOGENETICS INC.

099

:| :| ||::||:|| ||: YTNYTNTTYGARACNAAR 738 CTGCTCTTTGAAACTAAG 814

CGAATGGGCAATGGCGCTCTCCATGGGGACCACCAACGCTTCTCCACCTTTGCAGGATTC

TCAGATACATCCAGCAATCATGCTGTGCTGAAGCTAGCCAAAGGGGATGAGGTTTGGCTG

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737 561 797 721 δ g ò ø nucleic acids which encode it (AAC64058, AAC64063). Zacrp3 is a homogue of adipocyte complement related protein (ACRP30) and contains a collagen-like domain comprising Gly-Xaa-Xaa or Gly-Xaa-Pro repeats, and C-terminal Clq domain comprising 10 beta-strands. The zacrp3 gene is located on chromosome 5pl2. The invention also relates to zacrp3 fragments, fusion proteins containing zacrp3 polypeptides, zacrp3-specific antibodies, expression constructs and host cells

comprising zacrp3 nucleic acids, and methods of recombinant production of sacrp3. Human zacrp3, and its agonists and antagonists may be used in the study and modulation of cellular metabolism and energy balance in mammals, and may therefore be used to treat disorders such as obesity and anorexia, and conditions associated with these disorders. Due to its Clq like domain, zacrp3 and zacrp3-containing fusion proteins may be useful as antimicrobial agents, promoting lysis or phagocytosis of infectious organisms such as bacteria or viruses. Zacrp3, its fragments, fusion conjagen-induced platelet aggregation, adhesion, or activation, and may therefore have potential for promoting blood flow within the vasculature of a mammal e.g., to treat injury to the vasculature or other collagenous tissue. Human zacrp3 and its antibodies may additionally be used to study dimerisation and oligomerisation. The present sequence represents a cerupa man acrps and its antibodies may additionally be used to study dimerisation and oligomerisation. The present sequence represents a ; 0 196 77 ATGCTTTGGAGGCAGCTCATCTATTGGCAACTGCTGGCTTTGTTTTTCCTCCTTTTTGC 136 256 121 AARTGYTGYCAYGGNGAYTAYWSNTTYMGNGGNTAYCARGGNCCNCCNGGNCCNCCNGGN 180 316 240 376 300 436 360 496 616 9/9 9 Gaps CTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGT GGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGCCTTCGAGGGGAGCGGGGGCAG CATGGCCCCCAAAGGAGGAGAAGGGCTACCCGGGGATTCCACCAGAACTTCAGATTGCATTC CCTCCTGGCATTCCAGGAAACCATGGAAACAATGGCAACAATGGAGCCACTGGTCATGAA AAGTGTTGTCATGGAGACTACAGCTTTCGAGGCTACCAAGGCCCCCCTGGGCCAACGGCC GGTGTGTATTTCTTCACCTTCAGCATGATGAAGCATGAGGGATGTTGAGGAAGTGTATGTG TACCTTATGCACAATGGCAACACAGTCTTCAGCATGTACAGCTATGAAATGAAGGGCAAA ATGGCTTCTCGCCAACCCACTTCAGCAATCAGAACAGTGGGATTATCTTCAGCAGTGTT ö Length 738; Indels Sequence 738 BP; 130 A; 74 C; 145 G; 99 T; 290 other; DB 21; Ouery Match 31.8%; Score 544.2; DB 21; Best Local Similarity 60.7%; Pred. No. 7.9e-148; Matches 448; Conservative 165; Mismatches 125; 317 377 361 481 541 137 197 257 181 437 497 421 557 617 ò QQ Q Dp g QQ Q g qq ò ò ò õ qq ò ò ò ò δ q

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention relates to nucleic acid sequences AAF93744 - AAF93916
which encode human secretory or membrane proteins represented by
AAB88177 - AAAB84295 and AAF62232 - AAF62235 which are used to isolate the
AAB88177 - AAAF94295 and AAF62223 - AAF62235 which are used to isolate the
CAAF93917 - AAAF94295 and AAF62232 - AAF62235 which are used to isolate the
cobb sequences of the invention. The invention also includes methods for
the production of antibodies directed against the proteins, and cDNA
sequences, which can be used in vectines. The polynucleotide sequences
can be used in gene therapy. The polynucleotide sequences and the
protein/membrane protein expression. The nucleic acids and complementary
corporation may be used as DNA probes in diagnostic assays
corporation also be used as DNA probes in diagnostic assays
corporation and protein cacids and complementary
corporation and protein acids according to detect and quantitate the
presence of similar nucleic acid sequences in samples. They may also be
consed to study the expression and function of secretory proteins/membrane
colypeptides and their role in metabolism. The polypeptides may be used
as antigens in the production of antibodies against them and in assays to
identify modulators (agonists and antagonists) of expression and
continued.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        activity. The antibodies and antagonists may also be used as therapeutic agents to down regulate expression and activity. The antibodies may also
                                                                                                                                                                          Primer specific for DNA encoding secretory/membrane protein SEQ ID 649.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secretory proteins/membrane proteins, useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            be used as diagnostic agents for detecting the presence of the polypeptides in samples (e.g. by enzyme linked immunosorbant assay (ELISA). Examples of diseases which may be treated include rheumatoid
                                                                                                                                                                                                               Human; secretory protein; membrane protein; vaccine; gene therapy; rheumatoid arthritis; diabetes; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hayashi K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy or as candidate target molecules in drug development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sugiyama T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 169 A; 105 C; 101 G; 170 T; 7 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 5; SEQ ID 649; 609pp + CD ROM; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kawai Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nishikawa T,
                                                                    AAF94215 standard; DNA; 552 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                99JP-0194179.
2000JP-0118775.
2000JP-0183766.
                                                                                                                                                                                                                                                                                                                                                                              07-JUL-2000; 2000EP-0114090.
                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HELI-) HELIX RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   arthritis and diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-093989/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Isogai T,
                                                                                                                                                                                                                                                                                                                                                                                                              08-JUL-1999;
11-JAN-2000;
02-MAY-2000;
                                                                                                                                          23-MAY-2001
                                                                                                                                                                                                                                                                                                      EP1067182-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 552
                                                                                                                                                                                                                                                                                                                                          10-JAN-2001
                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                    AAF94215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ota T,
                                RESULT 23
AAF94215/
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sequence tag; secreted protein; cDNA isolation;
                                                                                                                                                                                                 1454
                                                                                                                                                                                                                                                                                                                                  1515 ATATCTCATAGAGGTACAGTGCCAATAGATATTCAAATGTTGCATGTTGACCAGAGGGAT 1574
                                                                                                                                                                                                                                                                                                                                                                                                     TTTATATATCTGAAGAACATACACTATTAATAAATACCTTAGAGAAAGATTTTGACCTGGCT 1634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1635 TTAGATAAAACTGTGGCAAGAAAATGTAATGAGCAATATATGGAAATAAACACACTTT 1694
                                                                                                                                                                                                                                                                                     243 CGCCCCCAACTTCGGATGTGGGGTCAGGAGGTTGACTATTAACAAATGTCATAA 184
                                                                                                                                                                                                                                                                                                                                                     183 ATATCTCATAGAGGTACAGTGCCAATAGATATTCAAATGTTGCATGTTGACCAGAGGGAT 124
                                                                                                                                                                                                                                                                                                                                                                                                                                    64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                 423 GCCTTATTAGCTAATTTAGTGCCCTCCGTGTTCAGCTTAGCCTTTGACCCTTTGCTTTG
                                                                                                                                                 1455 CGCCCCCAACTTCGGATGTGGGGTCAGGAGGTTGAGGTTCACTATTAACAAATGTCATAA
                               482 ATTTGAGAGAATCGGATGTAGTGATATG-CAGGGCTGGGGCAAGAACAGGGGCACTAGCT
                                                                                                                                 ATCCACAAAATACATTAAAACTCTGAATTCACATACAATGCTATTTTAAAGTCAATAGAT
                                                                                                                                                                                                1395 TTTAGCTATAAAGTGCTTGACCAGTAATGTGGTTGTAATTTTGTGTATGTTCCCCCACAT
                                                                                                                                                                                                                   1275 GCCTTATTAGCTAATTTAGTGCCCTCCGTGTTCAGCTTAGCCTTTGACCCTTTCCTTTTG
ATTTGAGAGAATCGGATGTAGTGATATGACAGGGCTGGGGCAAGAACAGGGGCACTAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                     Duclert A, Giordano J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human secreted protein 5' EST, SEQ ID NO: 2872.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID 2872; 71pp + CD-ROM; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy; chromosome mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC02874 standard; cDNA; 471 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-2000; 2000EP-0200610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-0122487.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expressed
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000-500381/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAG02868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTT 1697
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAC02874;
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Score 498.6; DB 22; Length 552; Pred. No. 1.3e-134; 0; Mismatches 15; Indels 2;

29.1%; 96.9%;

526; Conservative

Matches

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Local Similarity

Query Match

1156 TTAATTTAATACCAGTTTTCAGGAACCCCTGAAGTTTTAAGTTCATTATT-CTTTATAAC 1214

Β;

Lacroix

Duclert A, Dumas Milne Edwards J,

(GEST) GENSET

WPI; 1999-153781/13. P-PSDB; AAY11485

98WO-1B01235

31-JUL-1998; 11-FEB-1999

WO9906551-A2

97US-0905133

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The present sequence is one of a large number of 5' ESTs derived from DRNAs encoding secreted proteins. An ORF has been identified within the sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures. They are used to obtain uppercean regulatory sequences and to design expression and secretion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTCCTCCCTTTTTGCCTGTGTCAGATGAATACATGGAGTCTCCACAAACCGGAGGACT 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGGAGCGGGGCAGCATGGCCCCCAAAGGAGAAAGGGCTACCCGGGGGATTCCACCAGA 420
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                                                                                                                                                                                                                                                                                                                                                                                          GGCATCTGCCCGAGGAGCCACGCTCCTGGAGCTCTGCTGCTGTCTTCTCAGGGAGACTCTGA 60
                                                                                                                                                                                                                                                                                                                                                                                                                              12 GGCATCTGCCCGAGGAGCCACGCTCCTGGAGCTCTGCTGTCTTCTCAGGGAGACTCTGA 71
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                                                                                                                                                                                                                                                                                                              Score 452; DB 21; Length 471;
Pred. No. 4.4e-121;
1; Mismatches 1; Indels C
                                                                                                                                                                                                                                                                            Sequence 471 BP; 107 A; 130 C; 134 G; 99 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTICAGATIGCATICATGGCTICTCTGGCAACC
                                                                                                                                                                                                                                                                                                                  26.4%;
Best Local Similarity 99.6%;
Matches 452; Conservative
                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                             vectors.
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                                                                                                                                                                                                                                                                               sequence tag; diagnosis;
                                                                                                                                                                                                                                              Human secreted protein 5' EST SEQ ID No 149.
                                                                                                                                                                                                                                                                              EST; expressed
                                                                                                                                                        AAX39551 standard; DNA; 472
                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                              secreted protein;
                                                                                                                                                                                                                  21-JUN-1999
                                                                                                                                                                                  AAX39551;
                                                                                                                                                                                                                                                                            Human;
                                                                                                                           RESULT 25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.
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                                                                                                                                                                                                                                                                          New nucleic acids encoding human secreted - proteins obtained from cDNA libraries prepared from substantia nigra, cerebellum, surrenals and fetal brain tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGCATCTGCCCGAGGAGCCACGCTCCTGGAGCTCTGCTGTCTTCTCAGGGAGACTCTGA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTCCTCCCTTTTTGCCTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACAGGCTTTCGAGGCTACCAAGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCTGGGCCACCGGGCCCTCCTGGCATTCCAGGAAACCATGGAAACAATGGCAACAATGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 472 BP; 108 A; 130 C; 134 G; 99 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 263; 434pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best_Local Similarity 99.6%;
Matches 452; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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AAF93419
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for:
(a) assessing whether a patient is afflicted with prostate cancer;
(b) monitoring the progression of prostate cancer in a patient;
(c) assessing the efficacy of a test compound to inhibit prostate

    (e) selecting a composition for inhibiting prostate cancer in a patient;
    (f) assessing the prostate cell carcinogenic potential of a compound;
    (g) determining whether prostate cancer has metastasized in a patient;

                                                                                                                                                                                                                                                                                                                                               cytostatic; carcinogen; pharmacodyanamic marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (b) monitoring the progression or process.

(c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; the efficacy of a therapy for inhibiting prostate cancer in a patient;

(d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    determining whether prostate cancer has metastasized in a patient, assessing the aggressiveness or indolence of prostate cancer in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       587 AAGCATCAGGATGTTGAGGAAGTGTATGTACCTTATGCACAATGG-CAACACAGT-CT 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            as a pharmacodyanamic or pharmacogenomic marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 472 BP; 141 A; 105 C; 92 G; 134 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20.2%; Score 345.6; DB 2
87.7%; Pred. No. 4.4e-90;
Live 0; Mismatches 54
Human prostate expression marker cDNA 56772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 10943; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schlegel R, Endege WO, Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                       gene; ss
                                                                                                                                                                 BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-18319P.
2000US-189862P.
2000US-207454P.
2000US-211314P.
                                                                                                                                                            ABV56781 standard; cDNA; 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2001; 2001WO-US05171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-255281P
                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 87.7
Matches 400; Conservative
                                                                                                                                                                                                                                                                                                                                               Human; prostate cancer;
pharmacogenomic marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (I) is also useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200160860-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .6-MAR-2000;
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                                                                                                                                                                                                                                                    17-SEP-2002
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                                                                                                                                                                                                          ABV56781;
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                                                                                                                  RESULT · 26
ABV56781
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645 TCAGCATGTACAGCTATGAAATGAAGGGCAAATCAGATACATCCAGCAATCATGCTGC 704

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Sequences AAF93180 - AAF93743 represent polynucleotide sequences encoding human SRT proteins. The CDNA sequences are isolated from various different human tissue cobh libraries. The invention relates to a method for detecting cDNA encoding an SRT protein, a vector containing cDNA encoding SRT, a host cell transformed with the vector, an isolated SRT polypeptide, and an antibody which binds to SRT. The polynucleotide sequence can be used in gene therapy and is useful in the recombinant production of SRT polypeptides, as a hybridisation probe to screen libraries to isolate cDNAs with sequence identity to SRT polypeptides, to map the gene encoding the SRT polypeptides and analysing genetic disorders, tissue typing and disease tissue detection. The SRT polypuncleotide sequences can be used in polymerase chain reaction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid molecule encoding a SRT polypeptide is useful for production of recombinant SRT polypeptides, gene mapping, diagnosing genetic disorders and for gene therapy -
                                                                                                                                                                                                                                                                                                                                                             TCACGCTACAGGTACACCAATAATGTTGGACAATTCAGGGGCTCAGAAGAATCAACCACA 1004
                                                                                                                 885 AACATTAAAGTTGAGGGTTTTACATTGCTGTATTCAAAAAATTATTGGTTGCAATGTTGT 944
                                                                                                                                                                                                                                                                                                                      AACATTAAAGTGGAGGGTTTTACTTTGCTGTATAAAAAAATTATGGGTTGCAATGTTGT 376
77. TCAGCATGTCCAGTTATAAAAGGAAGGCAAATCAAAATCCTTCCACCATTCTTCCTGTGC 136
                                                                                                                                                                                                ACTAGAATAGCTCCACTTTGGGGAAGACTTGTAGCTGAGCTGATTTGTTACGATCTGAGG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA encoding SRT protein isolated from prostate tissue SEQ ID 240.
                                       TGAAGCTAGCCAAAGGGGATGAGGTTTGGCTGCGAATGGGCAATGGCGCTCTCCATGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; SRT; gene therapy; gene mapping; tissue typing;
                                                                                                                                                                                                                                                                                                                                                                                                                                           1005 AAATAGTCTTCTCAGATGACCTTGACTAATATACTC 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Fig 240; 663pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0145701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker KP, Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-112729/12.
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Gaps

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Indels

BP.

548

DB 22; Length 548;

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422 CTTCAGATTGCATTCATGGCTTCTCTGGCAACCCACTTCAGCAATCAGAACAGTGGGATT 481
                                                                                                                                                                                                                                                                                                                                                                              Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                           Human brain expressed single exon probe SEQ ID NO: 8456.
 from WIPO at ftp.wipo.int/pub/published_pct_sequences
                         Sequence 548 BP; 182 A; 81 C; 101 G; 184 T; 0 other;
                                              8.0%; Score 136.2; DB 22;
97.9%; Pred. No. 4.9e-29;
tive 0; Mismatches 3;
                                                                                                                                                                                                                    446 GGGCCCCAGTATCAGGTGAG 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001; 2001WO-US00667
                                                                                                                                                                                            542 GGGCCCCAGTATCAGGTGTG
                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                           Best Local Similarity 97.9
Matches 138; Conservative
                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                        epilepsy; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-483446/52
                                                                                                                                                                                                                                                                                 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200157275-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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30-JUN-2000;
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention.
                                                                                                                                                                                                                                                                                                         AAK08465;
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                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
new therapeutic molecules and generation of antisense RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention.
                                                                                                          AGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACA 218
                                                                                                                                                                     398 GCTTTCGAGGCTACCAAGGCCCCCTGGGCCACCCGGGCCCTCCTGGCATTCCAGGAACC 457
                                                                                                                                                                                                                                 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly
                                                                                                                                  338 AGTNTCCACAAACCGGAGGACTACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACA 397
                                                                                                                                                                                                       279 ATGGAAACAATGGCAACAATGGAGCCACTGGTCATGAAGGAGCCAAAGGTGAGAAGGGCG 338
                                                                                   Gaps
                                                                                                                                                         219 GCTTTCGAGGCTACCAAGGCCCCCCTGGGCCACCGGGCCCTCCTGGCATTCCAGGAAACC
                                                                                                                                                                                                                     Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention relates to a single exon nucleic acid probe for
                                                           Length 546;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 8493; 639pp + sequence listing; English.
                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   Human foetal liver single exon nucleic acid probe #8493.
                                   C; 155 G; 108 T; 5 other;
                                                          Score 208; DB 22;
Pred. No. 5.9e-50;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rank DR;
                                                                                                                                                                                                                                                                     ACAAAGGTGACCTGGGCCTCGAGGGGA 546
                                                                                                                                                                                                                                                         339 ACAAAGGTGACCTGGGGCCTCGAGGGGAG 367
                                                                                                                                                                                                                                                                                                                                             ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen W,
                                                           Match 12.1%;
Local Similarity 99.5%;
es 208; Conservative
                                   BP; 149 A; 129
                                                                                                                                                                                                                                                                                                                                          ABA60188 standard; DNA; 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0180312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0207456
2000US-0608408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0632366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US00669
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2000US-0236359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000GB-0024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-483447/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MO200157277-A2.
 screening for
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27-SEP-2000;
04-OCT-2000;
                                    546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2001
                                     Seguence
                                                                                                                                                                                                                                                                                                                                                                    ABA60188;
                                                            Query Match
            and DNA
                                                                                  Matches
                                                                                                          159
                                                                                                                                                                                                                                                                                 518
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                                                                                                                                                                                                                                                                                                                                 ABA60188
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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single exon nucleic acid probes for analyzing gene expression in human brains \boldsymbol{\cdot}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; SEQ ID NO: 8456; 650pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        548;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 548 BP; 182 A; 81 C; 101 G; 184 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                    Chen W, Rank DR;
                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR DYNAMICS INC.
2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
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                                        386 ATCTTCAGCAGTGTTGAGCAACATTGGAAACTTCTTTGATGTCATGACTGGTAGATTT 445
                                                                                                  482 ATCTTCAGCAGTGTTGAGACCAACATTGGAAACTTCTTTGATGTCATGACTGGTAGATTT 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                422 CTTCAGATTGCATTCATGGCTTCTCTGGCAACCCACTTCAGCAATCAGAACAGTGGGATT 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                             Human; bone marrow expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human bone marrow -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 4; SEQ ID NO: 8904; 658pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                  Human bone marrow expressed single exon probe SEQ ID NO: 8904
               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                           microarray; cancer; leukaemia; lymphoma; myeloma; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 548 BP; 182 A; 81 C; 101 G; 184 T; 0 other;
 Pred. No. 4.9e-29;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rank DR;
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0
                                                                                                                                                                          446 GGGCCCCAGTATCAGGTGAG 466
                                                                                                                                                                                                                                                            AAK34347 standard; DNA; 548 BP.
                                                                                                                                                           542 GGGCCCCAGTATCAGGTGTG 562
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chen W,
Best Local Similarity 97.9%;
Matches 138; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-AUG-2000, 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000, 2000US-0236559.
04-OCT-2000, 2000GB-0024263.
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Matches 138; Conservative
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30-JUN-2000; 2000US-0608408.
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                                                                                                                                                                                                                                                                                                                     (first entry)
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Search completed: March 13, 2003, 15:58:42
Job time : 441 secs
                                                                        446 GGGCCCCAGTATCAGGTGAG 466
                                                          542 GGGCCCCAGTATCAGGTGTG 562
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(without alignments)
2106.432 Million cell updates/sec
                                                                                                                                                                                                                                           1 MLWRQLIYWQLLALFFLPFC......LHGDHQRFSTFAGFLLFETK 246
                                                                                                                      March 13, 2003, 16:22:07; Search time 263 Seconds
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GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                              OM protein - nucleic search, using frame_plus_p2n model
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                                                                                                                                                                                                                                                                                                                                                                                                            2185239 seqs, 1125999159 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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Maximum DB seq length: 200000000
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Sequence:
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-MODEL-frame+_plan.model -DEV-x1h
-Q-Cq012_1/1870_spool/usl 0036641/runat_06632003_154638_21993/app_query.fasta_1.391
-Q-Cq012_1/1870_spool/usl 0036641/runat_06632003_154638_21993/app_query.fasta_1.391
-Q-Cq012_1/1870_spool/usl 0036641_seap -SUFFIX=rng -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=biosum62 -FRANS=human40.cdi
-LIST=45 -DGOALIGN=200 -THE_SCORE==pct -THE_MAX=100 -THE_MIN=0 -ALIGN=30
-USER=USI0036041_eCGN_11_263_erunat_06032003_154638_21993 -NCPU=6 -ICPU=3
-NOX=LOYADAY -NO_MAMP -LARGEQUERY -NCG_SCORES=0 -WAIT -LONGLOG -DEV_TIRROUT=120
-WARN_TIRROUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 Command line parameters: Jatabase :

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/SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.
N_Geneseq_101002:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Homo sapiens

XX OS

						SUMMARIES	
Re	Result No.	Score	% Query Match	Length	DB	QI	ption
1	; ; ;	1367	100.0	741	24	ABK35591	encoding
	7 m	1367	90	1709	22	AAC04038 AAF93874	Human cacrps cons, Human cDNA encodin
	4 r	1367	100.0	1712	21	AAA96336 ·	encoding a n
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	٧ م	1311	S	1035	22	AAC99776	Skin cell cDNA, SE
	0 0	1311	n w	1117	21	ABL34928 AAC64064	~ ;;
	10	1311	5	1123	21	AAZ61633	•
	12	1311	വ	1123	22	AA261/30 AAC99566	Skin cell cDNA, SE
	13	1311	S	1123	22	AAC99663	
	14	1311	95.9	1123	24	ABL34718 ABL34815	Rat cDNA isolated
	16	1291.5	. 4	1927	22	AAD12584	Human protein havi
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	36	1208	ဆထ	1620	22	AA13923U AA199523	Human polynucieoti Human polynucleoti
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υ		858.5	2 5	1799	22	AA161016 ABK35221	Human polynucleoti Human cDNA encodin
	23	721	20	471	21	AAC02874	secreted
	24		O L	472	20	AAX39551	secreted
	7 7 2 8	325	~ m	349 804	24	AAF93419 ABK35598	Gene encoding skr Gene encoding nove
	27	316	m 1	1107	21	AAZ61744	encoding
	7 88	316	3	1107	22	AAC99677 ABL34829	Skin cell cDNA, SE Rat cDNA isolated
	30	315	m	870	22	AAD16350	SBh
	31	315	23.0	970	24	ABQ86182	Novel human gene.
	336	315	n	912	22	AAC89867	
	34	315	9	1242	24	AAL44067	Human genset metab
	36	313	2	855	21	AAC67788	− oυ
	37	309	2	1282	22	AAC89875	zacrp7 c
	80 G F0 F	306	20	1052	21	AA261811 AAC99744	Skin cell chNA. SE
	40	306		1052	24	ABL34896	DNA isolate
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	4 4 4	304	22.2	932	217	AAZ45606 AAZ45606 AAT51048	encoding p
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						ALIGNMENTS	
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ABI	35	35591	standard;	I; DNA;	741	BP.	
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DE	Gene	ne encoding	ling novel	rel human		secreted or membrane-associated	ociated protein #10.
KW		Human; sec	secreted p	protein;	шеп	brane-associated prote	n; hypertension;
K K		inflammatory disorder; skeletal developmental	ory disc levelopm	order; n ental d	isor	neurological disorder; haematopoietic disorder disorder: growth abnormality; autoimmune disord	topoietic disorder;
KW		neurodegenerative disorder	erative	disord	er;	er; nervous system disorder	er; bacterial infection;
X X		peripheral m hypotension:	. myelin on: sexu	myelinopathy; viral n: sexual development		infection; cancer; disorder; blood d	; obesity; diabetes; disorder; qene; ds.
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Claim 31; Page 107-109; 123pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to the isolation of novel human secreted or membrane associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. asthma), neurological disorders (e.g. dementia), haematopoietic disorders, wheeleal developmental disorders, growth abnormalities, neurological developmental disorders, growth abnormalities, neurodegenerative disorders (e.g. Huntington's disease), nervous system disorders, autoimmune disorders (e.g. Huntington's disease), nervous system disorders, diabetes, viral and bacterial infections, alpha-mannosidosis, diabetes, cancers, malignant tumours, hyper- and hypotension, obesity, bulimia, annorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental or sexual development disorders, and dysfunctions of the blood cascade system including those leading to stroke. ABK35582-ABK35609 represent
                                                                                                                                                                                                                            Novel secreted and membrane-associated polypeptides and polynucleotides encoding the polypeptides, for preventing, treating and ameliorating cancers, mental or sexual developmental disorders, and malignant tumours
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 191 A; 178 C; 200 G; 172 T; 0 other;
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                                                                                                                                                                                                                                                                                  Claim 2; Page 106; 151pp; English.
                                                                                                                                                           Lai Y,
                                                                                                            (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LTD.
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                                                                                                                                                           Cogswell JP,
                                                                                                                                                                    Xiang Z,
                                                                                                                                                                                         WPI; 2002-188468/24
P-PSDB; AAU84371.
                                                                                                                                                                                                                            Novel secreted and encoding the polype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
Query Match:
DB:
           WO200204600-A2
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                                                                              .2-JUL-2000;
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                                  17-JAN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human zacrp3; adipocyte complement related protein homologue;
ACRP30; C1q domain; collagen-like domain; energy balance modulation;
cellular metabolism; metabolism; anorexia;
antimicrobial agent; infection; platelet aggregation inhibition;
adhesion; activation; vascular injury; antibacterial; antiviral; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel zacrp3 polypeptides used to treat or prevent bacterial or viral infections, for wound healing, improving blood flow, and to analyze
241 GGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGCCTCCAGGGGAGCGGGGGCG
                                                                181 TyrLeuMetHisAsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerAspThrSerSerAsnHisAlaValLeuLysLeuAlaLysGlyAspGluValTrpLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetAlaSerLeuAlaThrHisPheSerAsnGlnAsnSerGlyIleIlePheSerSerVal
                                                                                                                                                                                                                                                                                                                                          161 GlyValTyrPhePheThrPheSerMetMetLysHisGluAspValGluGluValTyrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgMetGlyAsnGlyAlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPhe
                                                                                                                                                                                                                                                    GluThrAsnIleGlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC64058 standard; cDNA; 1696 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human zacrp3 cDNA, SEQ ID NO:1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   energy efficiency in mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-APR-2000; 2000WO-US10454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuLeuPheGluThrLys 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721 CTGCTCTTTGAAACTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Piddington CS, Bishop
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P-PSDB; AAB29580.
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us-10-036-041-2.rng

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zacrp9-specific antibodies, expression constructs and host cells comprising zacrp3 nucleic acids, and methods of recombinant production of zacrp3. Human zacrp3, and its agonists and antegonists and any be used in the study and modulation of cellular metabolism and energy balance in mammals, and may therefore be used to treat disorders such as obesity and anorexia, and conditions associated with these disorders. Due to its Clq like domain, zacrp3 and zacrp3-containing fusion proteins may be useful as antimicrobial agents, promoting lysis or phagocytosis of infectious organisms such as bacteria or viruses. Zacrp3, its fragments, fusion proteins, antibodies and activity modulators may also be used to inhibit collagen-induced platelet aggregation, adhesion, or activation, and may therefore have potential for promoting blood flow within the vasculature
                          The invention relates to the human zacrp3 protein (AAB29580) and to nucleic acids which encode it (AAC64058, AAC64063). Zacrp3 is a homogue of adipocyte complement related protein (ACRP30) and contains a collagen-like domain comprising Gly-Xaa-Xaa or Gly-Xaa-Pro repeats, and a C-terminal Clq domain comprising 10 beta-strands. The zacrp3 gene is located on chromosome 5p12. The invention also relates to zacrp3 fragments, fusion proteins containing zacrp3 pupperlides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of a mammal e.g., to treat injury to the vasculature or other collagenous tissue. Human zacrp3 and its antibodies may additionally be used to study
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     dimerisation and oligomerisation. The present sequence represents cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encoding human zacrp3.
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Sequence 1696 BP; 482 A; 355 C; 386 G; 473 T; 0 other;

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Alignment Pred. No. Score: Percent S Best Loca Query Mat	ment So No.: :: int Sim: Local :	Alignment Scores: Pred. No.: Score: Percent Similarity: Best Local Similarity: Query Match:	1.94e-99 1367.00 100.008 100.008 100.008	Length: Matches: Conservative: Mismatches: Indels: Gaps:	1696 246 0 0 0	
US-10	-036-04	-041-2 (1-246)	x AAC64058	(1-1696)		
δλ	-	MetLeuTrpArgG	InLeuIleTyrTrpG	InteuteuAlaLeuP	WetLeuTrpArgGlnLeulleTyrTrpGlnLeuLeuAlaLeuPhePheLeuProPheCys	3
qq	69	ATGCTTTGGAGGC.	AGCTCATCTATTGGCA	AACTGCTGGCTTTGT	TTTTCCTCCTTTTTGC	-
δλ	21	LeuCysGlnAspG	luTyrMetGluSerPr	roGlnThrGlyGlyLe	euProProAspCysSer	4
qq	129		AATACATGGAGTCTCC	CACAAACCGGAGGACT	CTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGT	-
Qy	41		lyAspTyrSerPheAr	rgGlyTyrGlnGlyPr	LysCysCysHisGlyAspTyrSerPheArgGlyTyrGlnGlyBroProGlyProFig	9
qq	189		GAGACTACAGCTTTCC	GAGGCTACCAAGGCCC	CCCTGGGCCACCGGGC	C
ογ	61		roGlyAsnHisGlyAs	snAsnGlyAsnAsnGl	ProProGlyIleProGlyAsnHisGlyAsnAsnAsnAsnAsnAshIaThrGlyHisGlu	æ
Q	249		CAGGAAACCATGGAAA	ACAATGGCAACAATGC	CCTCCTGGCATTCCAGGAAACCATGGAAACAATGGCAACAATGGAGCCACTGGTCATGAA	m.
٥y	81		luLysGlyAspLysGl	lyAspLeuGlyProAn	GlyAlaLysGlyGluLysGlyAspLysGlyAspLeuGlyProArgGlyGluArgGlyGln	_
qq	309		AGAAGGCCGACAAAGC	GTGACCTGGGGCCTCC	GAGGGAGCGGGGGCAG	C.
δy	101		lyGluLysGlyTyrPr	roGlylleProProG	HisGlyProLysGlyGluLysGlyTyrProGlyIleProProGluLeuGlnIleAlaPhe	
QQ	369		GAGAGAGGCTACC	CGGGGATTCCACCAG	AACTTCAGATTGCATTC	4
, oy	121		laThrHisPheSerAs	snGlnAsnSerGlyIl	MetalaSerLeualaThrHisPheSerAsnGlnAsnSerGlyIleIlePheSerSerVal	_
q	429		CAACCCACTTCAGCAA	ATCAGAACAGTGGGAI	TTATCTTCAGCAGTGTT	4
ογ	141		1yAsnPhePheAspVa	alMetThrGlyArgP	GluThrAsnIleGlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSer	~
qq	489		GAAACTICTTTGATGI	rcatgactggtagati	TTGGGGCCCCAGTATCA	L.
Qy	161		heThrPheSerMetMe	etLysHisGluAspVa	GlyValTyrPhePheThrPheSerMetMetLysHisGluAspValGluGluValTyrVal	_
đ	549		TCACCTTCAGCATGAT	rgaagcatgaggatg1	GGTGTGTTTTTTTTTCTTCACCTTCAGCATGAGGATGAGGATGTTTGAGGAAGTGTATGTG	9

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100 368 120 428

308

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160

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488

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This invention relates to nucleic acid sequences AAF93744 - AAF93916
which encode human secretory or membrane proteins represented by
AAB88117 - AAB8819. Included in the invention are primers
CAAB8917 - AAF94295 and AAF62232 - AAF62235 which are used to isolate the
CCC CDNA sequences of the invention. The invention also includes methods for
CCC cDNA sequences, which can be used in vaccines. The polynucleotide sequences
CCC can be used in gene therapy. The polynucleotide sequences
CCC can be used in gene therapy. The polynucleotide sequences
CCC can be used asy be used in the prevention, treatment and
CCC diagnosis of diseases associated with inappropriate secretory
CCC can be used as DNA probes in diagnostic assays
CCC can be used as DNA probes in diagnostic assays
CCC can be used as DNA probes in diagnostic assays
CCC can be used as DNA probes in samples. They may also be
CCC sequences may also be used as DNA probes in samples. They may also be
CCC used to similar nucleic acid sequences in samples. They may also be
CCC used to study the expression and function of secretory proteins/membrane
CCC as antigens in the production of antibodies against them and in assays to
CCC dearposity. The antibodies and antagonists may also be used as therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agents to down regulate expression and activity. The antibodies may also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acids encoding secretory proteins/membrane proteins, useful in gene therapy or as candidate target molecules in drug development -
                                                                                                                                        Human cDNA encoding a membrane or secretory protein clone PSEC0232
                                                                   Human; secretory protein; membrane protein; vaccine; gene therapy; rheumatoid arthritis; diabetes; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ž
TyrLeuMetHisAsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLys
                Ota T, Isogai T, Nishikawa T, Kawai Y, Sugiyama T, Hayashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID 261; 609pp + CD ROM; English.
                                                                                                                                                                                                                                                                                                                         AAF93874 standard; cDNA; 1709 BP.
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11-JAN-2000; 2000JP-0118775.
02-MAY-2000; 2000JP-0183766.
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be used as diagnostic agents for detecting the presence of the polypeptides in samples (e.g. by enzyme linked immunosorbant assay (ELISA). Examples of diseases which may be treated include rheumatoid
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                                        0 other;
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Matches:
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Indels:
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AAA96336 standard; cDNA; 1712 BP

AAA96336

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The present sequence encodes a secreted or transmembrane polypeptide. The specification describes polypeptides designated PRO1484, PRO4334, PRO1122, PRO1899, PRO1890, PRO1897, PRO4405, PRO4352, PRO4352, PRO4354, PRO4356, PRO4352, PRO4354, PRO4409, PRO5356, PRO4252, PRO4364, PRO4409, PRO5377, PRO4425, PRO5990, PRO6030, PRO4424, PRO4422, PRO4430 and PRO4409. PRO1808 polypeptide is useful for diagnosing tumour in a mammal. The polypeptides, their agonists and antagonists are useful treating a condition associated with expression or activity of the polypeptide. Conditions treated include obesity, diabetes or hyper-or hypo-insulinemia. The polypeptides are capable of inducing proliferation of mammalian kidney mesangial cells and are therefore useful for treating kidney disorders associated with decreased mesangial cell function such as Bergers disease or other nephropathies associated with Schonlein-Henoch purpura, celiac disease,
                                                                            Secreted protein; transmembrane protein; PR01484; PR04334; PR01122; PR01889; PR01890; PR01887; PR04185; PR04353; PR044357; PR04405; PR04356; PR04352; PR04425; PR04426; PR04408; PR04408; PR04408; PR04426; PR04422; PR04430; PR04499; tumour; obesity; diabetes;
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                                                                                                                                     insulinemia; kidney disorder; Bergers disease; nephropathy;
Schonlein-Henoch purpura; celiac disease; dermatitis herpetiformis;
Crohns disease; ss.
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                                                    encoding a novel polypeptide designated PRO1484
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99US-0125826.
99US-0127035.
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Stewart TA,
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dermatitis herpetiformis or Crohns disease. The nucleic acids may be us to generate transgenic animals for use in development and screening of therapeutically useful reagents and also for chromosome identification and tissue typing.
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                                              388 G; 475 T; 0 other;
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This sequence represents the CDNA for a human immune system molecule (IMOL) isolated as clone 1895540 from the Incyte BLADTUTO7 library. The MAA957789, and compositions comprising them are useful for the diagnosis, treatment or prevention of immunological disorders. Including cancer. The IMOL may be used to treat or prevent disorders associated with decreased expression or activity of IMOL, such as immunological disorders of inflammation, actinic keratosis, ANDS, Addison's disease), hematopoietic cancer, infections caused by virus (e.g. adenovirus, parvovirus, coronavirus), bacteria (e.g. Staphylococcus, Streptococcus, Shigella), fungi (e.g. Aspergillus, Blastomyces), parasites (e.g. Shigella), fungi (e.g. Aspergillus, Blastomyces), parasites (e.g. plawmania, michatina, protocoa), cell proliferative disorders (e.g. actinic keratosis, arteriosclerosis, bursitis), and cancers (e.g. actinic keratosis, arteriosclerosis, bursitis), and cancers (e.g. leukemia, melanoma, sarcoma). The peptides are also useful as immunogens for the development of antibodies that specifically recognizes these peptides. The polynucleotides may be used to detect and quantify gene expression in biopsied tissues in which expression of IMOL may be correlated with the disease, as targets in a microarray, to detect didividuals, and for screening libraries of compounds in drug screening techniques. Antibodies which specifically that the assays to monitor parients being treated the true.
                                                                                                      Anti-inflammatory; keratolytic; anti-HIV; anti-allergic; antianaemic; antiarteriosclerotic; antiasthmatic; antidabetic; nephrotropic; cancer; antigout; dermatological, antihyroid; virucide; hepatorropic; antibody; immunosuppressive; cytostatic; fungicide; protozoacide; antibacterial; gene therapy; diagnostic; immunological disorder; viral infection; ss; bacterial infection; fungal infection; parasitic infection; immunogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New human immune system molecules 1-15 and polynucleotides encoding them useful for diagnosing, treating or preventing e.g. immunological disorders, infections, cell proliferative disorders, microbial
                                                                        Human immune system molecule cDNA from Incyte clone 1890540.
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                                                           GAGACCAACATTGGAACTTCTTTGATGTCATGACTGGTAGATTTGGGGCCCCCAGTATCA
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     US-10-036-041-2 (1-246) x AAA95787 (1-1760)
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creted and membrane-associated polypeptides and polynucleotides the polypeptides, for preventing, treating and ameliorating mental or sexual developmental disorders, and malignant tumours
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                                                                                                                                                                                                                                                                                 Martensen
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                                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LTD.
                                                                                                                          12-JUL-2000; 2000US-218033P.
21-AUG-2000; 2000US-226517P.
                                                                                   12-JUL-2001; 2001WO-US21985
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                                                                                                                                                                                                                                                                                                    Smith RF, Xiang Z,
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P-PSDB; AAU84370.
WO200204600-A2.
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encoding the po
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Claim 2; Page 106; 151pp; English.

system alpha-mannosidosis, diabetes, cancers, malignant tumours, hyper- and hypotension, obesity, bulimia, anorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental or sexual development disorders, and dysfunctions of the blood cascade system including those leading to stroke, ABK35582-ABK35609 represent human secreted tem including those leading to stroke. ABK35582-ABK35609 represent genes encoding the novel human secreted or membrane-associated The present invention relates to the isolation of novel human secre or membrane-associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. asthma), neurological disorders (e.g. dementia), haematopoietic disorders, skeletal developmental disorders, growth abnormalities, neurodegenerative disorders (e.g. theumatoin s disease), nervous sy peripheral myelinopathies, viral and bacterial infections. proteins of the invention.

Sequence 960 BP; 261 A; 232 C; 262 G; 205 T; 0 other;

1 MetLeuTrpArgGlnLeuIleTyrTrpGlnLeuLeuAlaLeuPhePheLeuProPheCys 960 246 0 0 73 Conservative: Mismatches: Indels: Length: Matches: 21 LeuCysGlnAspGluTyrMetGlu------(1-960)US-10-036-041-2 (1-246) x ABK35590 4.94e-96 1320.50 77.128 77.128 96.608 Percent Similarity: Best Local Similarity: Query Match:

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                                                AlaValLeuLysLeuAlaLysGlyAspGluValTrpLeuArgMetGlyAsnGlyAlaLeu
                        GlyTyrProGlyIleProProGluLeuGlnIleAlaPheMetAlaSerLeuAlaThrHis
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The present polynucleotide encodes a polypeptide which is expressed in mammalian skin cells. The polypeptide is useful for stimulating keratinocyte growth and motility, inhibiting the growth of cancer cells, modulating angiogenesis, inhibiting angiogenesis and vascularisation of tunnours, modulating skin inflammation, stimulating the growth of epithelial cells, inhibiting the binding of human immunodeficiency virus (HIV)-1 to leukocytes, and treating inflammatory disease, cancer and neurological diseases. The polynucleotide can be used as a marker, in the identification of genetic disorders, and for the design of
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                                                    New isolated polynucleotide used in the identification of genetic disorders and encoding polypeptides used for treating inflammatory disease, cancer and neurological diseases -
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P-PSDB; AAB55908.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kumble KD;
                                                                                                                                                                                                                                                                  Human; rat; mouse; skin cell; skin wound; cancer; growth defect;
developmental defect; inflammatory disease; dermatological; vulnerary;
immunomodulator; anti-inflammatory; cytostatic; neuroprotective; gene;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for modulating immune responses
                     TACCTTATGCACAATGGTAACACGGTGTTCAGCATGTACAGCTATGAAACAAAGGGAAAA
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Percent Similarity: Best Local Similarity:

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                                                                                                                                                                                                                                                          HisGlyProLysGlyGluLysGlyTyrProGlyIleProProGluLeuGlnIleAlaPhe
                                                                                                                                                                                                                                                                                                                                                               GluThrAsnIleGlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSer
                                                                                                                                                                                                                                                                                                                                                                                                                GlyValTyrPhePheThrPheSerMetMetLysHisGluAspValGluGluValTyrVal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse zacrp2 DNA, SEQ ID NO:11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuLeuPheGluThrLys 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human zacrp3 homologue; ds
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                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to the human zacrp3 protein (AAB29580) and to nucleic acids which encode it (AAC64058, AAC64063). Zacrp3 is a homogue of adipocyte complement related protein (ACRP30) and contains a collagen-like domain comprising Gly-Xaa-Xaa or Gly-Xaa-Pro repeats, and a collagen-like domain comprising Gly-Xaa-Yaa or Gly-Xaa-Pro repeats, and contains Creminal Clq domain comprising Gly-Xaa a or Gly-Xaa-Pro repeats, and a creminal Clq domain comprising Gly-Xaa a or Gly-Xaa-Pro repeats, and creminal Clq domain comprising acrp3 polypeptides, carp3-specific antibodies, expression constructs and host cells carp73-specific antibodies, expression constructs and host cells comprising zacrp3 nucleic acids, and methods of recombinant production of cacrp3 will munan zacrp3, and its agonists and antagonists may be used in the study and modulation of cellular metabolism, and energy balance in mammals, and may therefore be used to treat disorders such as obesity and conditions associated with these disorders. Due to its Clq ilke domain, zacrp3 and zacrp3-containing fusion proteins may be useful as antimicrobial agents, promoting lysis or phagocytosis of infectious crganisms such as bacteria or viruses. Zacrp3, its fragments, fusion proteins, antibodies and activity modulators may also be used to inhibit collagen-induced platelet aggregation, and may also be used to inhibit collagen-induced platelet aggregation, and may also be used to inhibit and may and 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of a mammal e.g., to treat injury to the vasculature or other collagenous tissue. Human zacrp3 and its antibodies may additionally be used to study dimerisation and oligomerisation. The present sequence represents DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     290
                                                                                                                                                                                                                                                                                                    to treat or prevent bacterial or viral improving blood flow, and to analyze
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111 ATGCTCGGAGGCAGCATCTGGTGGCACCTGCTGCTTTTCCTCCCATTTGC 170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dimerisation and oligomerisation. The present sequence represents encoding mouse zacrp2, a homologue of human zacrp3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MetLeuTrpArgGlnLeuIleTyrTrpGlnLeuLeuAlaLeuPhePheLeuProPheCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1117 BP; 284 A; 272 C; 293 G; 268 T; 0 other;
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Matches:
Conservative:
Mismatches:
Indels:
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                                                                                                                                                                                                                                                                                                  zacrp3 polypeptides used tions, for wound healing, efficiency in mammals -
                                                                                                                                                                                                                                                                                                                                       energy efficiency in mammals
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1311.00
96.75%
95.93%
95.90%
                                                                            19-APR-2000; 2000WO-US10454.
                                                                                                                                                                                                  Piddington CS, Bishop PD;
                                                                                                                                                             (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                     WPI; 2000-665243/64.
P-PSDB; AAB29582.
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Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
WO200063377-A1
                                                                                                                      20-APR-1999;
                                       26-OCT-2000.
                                                                                                                                                                                                                                                                                                  Novel zacrp
infections,
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                                                                                                                                                                   141 GluThrAsnIleGlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSer 160
                                                                                                                                                                                                                          180
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                                                                                                                                                                                                                                                                                             221 ArgMetGlyAsnGlyAlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPhe 240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast; embryonic skin cell; keratinocyte stem cell; transit amplifying cell secreted; transmembrane; inflammation; cancer; neurological disease; angiogenesis; tumour vascularisation; growth disorder; developmental disorder; skin wound; hair follicle disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel polynucleotides useful for the treatment of various conditions including wounds and cancer -
                                                        HisGlyProLysGlyGluLysGlyTyrProGlyIleProProGluLeuGlnIleAlaPhe
                                                                                                                           SerAspThrSerSerAsnHisAlaValLeuLysLeuAlaLysGlyAspGluValTrpLeu
                                                                                                                                                                                                                                                                                                                                                    531 GAGACCAACATTGGAAACTTCTTCGATGTCATGACTGGGGAGATTTGGGGCCCCCGTATCA
                                                                                                                                                                                                                                                                                TyrLeuMetHisAsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLys
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cDNA encoding rat skin cell secreted protein, SEQ ID NO:28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Onrust R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Watson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENE-) GENESIS RES & DEV CORP LTD.
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98US-0188930.
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AA261730
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                                  dermal papilla, human keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocytes and neonatal foreskin fibroblasts, cand mouse embryonic skin, keratinocytes stem cells and transit amplifying cells. Polypeptides of the invention may be used to treat inflammation, cancer and neurological diseases. The proteins may be used to stimulate the growth and motility of keratinocytes, to inhibit the growth of cancer cells, to modulate anjuguenesis and tumour vascularisation, to modulate skin inflammation, to modulate epithelial cell growth and to inhibit binding of HIV-1 to leukocytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences Akz6100-z6182z represent cDNA sequences derived from several mouse, rat or human skin cell types. Sequences

C Akz6106-z61649, Akz61725-z61765, Akz61802-z61811 and Akz6182c encode proteins with an N-terminal signal sequence, indicating that the proteins are secreted. Sequences Akz61608-z61688, Akz61812-z61817
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                                                                                                                                                                                                                                                                  C; 321 G; 258 T; 1 other;
                        invention relates to novel nucleic acid sequences
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Matches:
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73; 235pp; English
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1311.00
97.15%
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                                                                                                                                                                                                                                       transmembrane domains.
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from several mouse, rat or human skin cell types. Sequences AAZ61606-261649, AAZ61725-Z61765, AAZ61802-Z61811 and AAZ61826 encode proteins with an N-terminal signal sequence, indicating that the proteins are secreted. Sequences AAZ61650-Z61668, AAZ61766-Z61780, AAZ61812-Z61817
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to novel nucleic acid sequences derived from rat
                                                                                                                                                         899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murison JG;
Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast; embryonic skin cell; keratinocyte stem cell; transit amplifying cell; secreted; transmembrane; inflammation; cancer; neurological disease; anglogenesis; tumour vascularisation; growth disorder; developmental disorder; skin wound; hair follicle disorder; anti-inflammatory; cytostatic; neuroprotective; vulnery; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel polynucleotides useful for the treatment of various conditions
                                                                                      and AAZ61827-Z61829 encode proteins with one or more putative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA encoding rat skin cell secreted protein, SEQ ID NO:203.
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                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
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98US-0188930.
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09-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rat; skin cell; cytostatic; antiinflammatory; anti-HIV; nootropic; neuroprotective; vulnerary; immunomodulatory; vaccine; keratinocyte growth stimulation; cancer; angiogenesis inhibition;
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Matches:
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The present polynucleotide encodes a polypeptide which is expressed in mammalian skin cells. The polypeptide is useful for stimulating keratinocyte growth and motility, inhibiting the growth of cancer cells, modulating angiogenesis, inhibiting angiogenesis and vascularisation of tumours, modulating skin inflammation, stimulating the growth of epithelial cells, inhibiting the binding of human immunodeficiency virus (HIV)-1 to leukocytes, and treating inflammatory disease, cancer and neurological diseases. The polynucleotide can be used as a marker, in the identification of genetic disorders, and for the design of
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inflammation; neurological disease;
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                                                                                                                                                                                                                                 Page 87; 352pp; English.
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Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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                                       WO200069884-A2.
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                                                                              15-MAY-2000;
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Pred. No.:
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                                                                                                                TyrLeuMetHisAsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLys
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P-PSDB; AAB55958.
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                                  C; 321 G; 258 T; 1 other;
the identification of genetic disorders, and for the oligonucleotides for examining expression patterns.
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Matches:
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ID ABL3
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The present invention provides the protein and coding sequences of cDNAs isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins have important roles in the induction of hair growth, cell proliferation and cell-cell interaction, in maintaining tissue integrity, in wound healing and in modulating immune responses. The present sequence is a cDNA of the invention.
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                                               Human; rat; mouse; skin cell; skin wound; cancer; growth defect;
developmental defect; inflammatory disease; dermatological; vulnerary;
immunomodulator; anti-inflammatory; cytostatic; neuroprotective; gene;
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                                                                                                                                                                                                                                                                             Sleeman M,
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(first entry)
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The present invention provides the protein and coding sequences of CDNAs isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins and cell-cell interaction, in maintaining tissue integrity, in wound healing and in modulating immune responses. The present sequence is a CDNA of the invention.
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Human; hydrophobic domain; gene therapy; nutritional supplement; cell proliferation; immunomodulatory; autoimmune disorder; antimicrobial; multiple sclerosis; rheumatoid arthritis; insulin-dependent diabetes; haematopoiesis; tissue growth activity; Parkinson's disease; cytostatic; Huntington's disease; Alzheimer's disease; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour growth inhibitor; anabolic; contraceptive; antiinfertility; antiinflammatory; ss.
                                                                                                                                                                                                                                                                                                             domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human proteins with hydrophobic domains and the nucleic acids encoding them, useful for preventing diagnosing and treating e.g. cancer, Alzheimer's and inflammation -
                                                                            Human protein having hydrophobic domain encoding cDNA clone HP10781.
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                                 AAD12584;
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                                                                                                                                                                                       Homo
AAD12584
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The present sequence is human protein with hydrophobic domain encoding CDNA clone HP10781. The polynucleotide and polypeptide of the invention may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The polynucleotides in any be used to produce the polypeptide, by inserting the nucleic acids into a host cell and culturing the cell to express the protein. The polynucleotides and its complementary sequences may also be used as DNA probes in diagnostic assays and also used in gene therapy. The polypeptides may also be used as antigens in the production of antibodies only assays to identify modulators of polypeptide expression and activity. The polypeptides and nucleic acids may be used as nutritional supplements, to modulate cytokine and cell proliferation activity, to modulate immune stimulation or suppression (e.g., for the treatment of microbial infections and autoimmune disorders such as multiple sclerosis, cheumatoid arthritis and insulin-dependent diabetes), to modulate

917

CTGCTTTTGAACTAAG

006

Claim 4; Page 352-354; 563pp; English.

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haematopoiesis, to modulate tissue growth activity (e.g. for the treatment of Parkinson's disease, Huntington's disease and Alzheimer's disease), to modulate activin and inhibin activity (e.g. for controlling fertility), to modulate chemotactic and chemokinetic activity, to modulate modulate care inflammation and to inhibit tumour growth. Ilgand activity, to modulate inflammation and to inhibit tumour growth.
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                                                                                                                                                                                                                                                                                                                                                                                                           269 AGCCATCCTAAAACTGGGACTGTGGATAATAACACTTCTACAGACCTAAAATCCCTGAGA
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                                                                                    550 A; 416 C; 452 G; 509 T; 0 other;
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Matches:
Conservative:
Mismatches:
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                                                                                                                       2.22e-93
1291.50
76.80%
76.80%
                                                                                    Sequence 1927 BP;
                                                                                                                                               Percent Similarity:
Best Local Similarity:
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Pred. No.:
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DB:
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AAPB9817 - AABB8419. Included in the invention are primers
AAPB9817 - AABB8419. Included in the invention are primers
AAPB9817 - AABB8419. Included in the invention are primers
CAABB8817 - AABB8419. Included in the invention are primers
CONA sequences of the invention. The invention also includes methods for
the production of antibodies directed against the proteins, and cDNA
sequences, which can be used in vaccines. The polynucleotide sequences
can be used in gene therapy. The polynucleotide sequences
can be used in gene therapy. The polynucleotide sequences
con the protein capters associated with inappropriate secretory
protein/membrane protein expression. The nucleic acids and complementary
sequences may also be used as DNA probes in diagnostic assays
(e.g. polymerase chain reactions (PCR)) to detect and quantitate the
presence of similar nucleic acid sequences in samples. They may also be
used to study the expression and function of secretory proteins/membrane
polypeptides and their role in metabolism. The polypeptides may be used
as antigens in the production of antibodies against them and in assays to
identify modulators (agonists and antagonists) of eversesion and
activity. The antibodies and antagonists may also be used as therapeutic
agents to down regulate expression and activity. The antibodies may also
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                                 AlaValLeuLysLeuAlaLysGlyAspGluValTrpLeuArgMetGlyAsnGʻlyAlaLeu 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid sequences AAF93744 - AAF93916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nseful
                                                                                                         for DNA encoding secretory/membrane protein SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunosorbant assay
                                                                                                                                                                                                                                                                                                                                                                     Human; secretory protein; membrane protein; vaccine; gene therapy; rheumatoid arthritis; diabetes; PCR primer; ss
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ACAGTCTTCAGCATGTACAGCTATGAAATGAAGGGCAAATCAGATACATCCAGCAATCAT
                                                          Nucleic acids encoding secretory proteins/membrane proteins, usefu
gene therapy or as candidate target molecules in drug development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hayashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            be used as diagnostic agents for detecting the presence of the polypeptides in samples (e.g. by enzyme linked immunosorbant as (ELISA). Examples of diseases which may be treated include rheu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sugiyama T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; SEQ ID 510; 609pp + CD ROM; English.
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                                                                                                                                                                                                                          BP.
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11-JAN-2000; 2000JP-0118775.
02-MAY-2000; 2000JP-0183766.
                                                                                                                                                                                                                        AAF94076 standard; DNA; 810
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                                                                                                                                                                                                                                                                                                                                      Primer specific
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810 BP; 200 A; 201 C; 218 G; 188 T; 3 other;

Sequence

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Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
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                                                                                 221 ArgMetGlyAsnGlyAlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPhe
                                                                                                      LeuCysGlnAspGluTyrMetGluSerProGlnThrGlyGlyLeuProProAspCysSer
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       810
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                     Conservative:
Mismatches:
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Matches:
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      3.1e-91
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Alignment Scores:
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The invention relates to human nucleic acids (AA157798-AA161369) and the encoded polypeptides (AAM88642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervopathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemctaclic/chemckinetic activity, haemostatic and thrombolytic activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the printed
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peripheral nervous system; neuropathy; central nervous system; CNS; Alzbeimer's; Parkinson's disease; hacense; haemostatic; amyotrophic lateral sclercosis; Shy-Drager Syndrome; chemotactic; chemotactic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                        Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                      disorders
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Zhang J;
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Yang Y,
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Matches:
Conservative:
Mismatches:
Indels:
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Wang Z, Wehrman T, Xu C, Xue AJ,
Zhou P, Goodrich R, Drmanac RT;
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Note: The sequence data for this patent did
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 1433; 10078pp; English.
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2000US-0552317.
2000US-0598042.
2000US-0653450.
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2000US-0653450.
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1211.00
100.00$
100.00$
88.59$
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                                                                                                             WO200153312-A1.
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                                                          leukaemia; ss
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                                                                                                                                                                                                             25-APR-2000;
09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
                                                                                                                                                                    26-DEC-2000;
                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   specification
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Zhao QA,
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2000US-0225447.
2000US-0225757.
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2000US-022681.
2000US-0227182.
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20000S-0237039.
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20000S-0239937.
                                     2000US-0218290
2000US-0220963
2000US-0224518
2000US-0224519
2000US-0225213
2000US-022526
2000US-0225266
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  Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant; antidiaterary; antiparasitic; cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder; neurological disease; infection; human; secreted protein; ss.
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2000US-0180628.
2000US-018664.
2000US-0189874.
2000US-0189874.
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2000US-0199123.
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04-FEB-2000; 2
24-MAR-2000; 2
16-MAR-2000; 2
11-MAR-2000; 2
11-MAR-2000; 2
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19-AJUN-2000; 2
20-JUN-2000; 2
07-JUN-2000; 2
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allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f) infectious diseases such as viral, bacterial, fungal and parasitic infections.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerMetMetLysHisGluAspValGluGluValTyrValTyrLeuMetHisAsnGlyAsn 187
                                                                                                                                                                                                                                                                                                            201 GACAAAGGTGACCTGGGGCCTCGAGGGGGGGGGGGGGGCAGCATGCCCCAAAGGAGAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 CAGTCTCCACAAACCGGAGGACTACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTAC
                                                                                                                                                                                                                                                                                                                                                                                                           88 AspLysGlyAspLeuGlyProArgGlyGluArgGlyGlnHisGlyProLysGlyGluLys
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Conservative:
Mismatches:
Indels:
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Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acids and polypeptides, useful for treating, preventing or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 21; 465pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ameliorating human disorders and diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ruben SM;
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P-PSDB; AAM99925.
 20 - OCT - 2000;
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01 - NOV - 2000;
08 - NOV - 2000;
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06-DEC-2000;
08-DEC-2000;
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05-JAN-2001;
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147

140

80 67 87

200

107

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The invention relates to the human zacrp3 protein (AAB29580) and to nucleic acids which encode it (AAC64058, AAC64063). Zacrp3 is a homogue of adippocyte complement related protein (ACR930) and contains a collagen-like domain comprising Gly-Xaa xaa or Gly-Xaa-Pro repeats, and collagen-like domain comprising 10 beta-strands. The zacrp3 gene is C-terminal Clq domain comprising 10 beta-strands. The zacrp3 gene is fragments, fusion proteins containing zacrp3 polypeptides, cacrp3 specific antibodies, expression constructs and host cells comprising zacrp3 nucleic acids, and methods of recombinant production of zacrp3. Human zacrp3, and its agonists and antagonists may be used in the study and modulation of cellular methodists and antagonists may be used in the study and may therefore be used to treat disorders such as obesity and memmals, and conditions associated with these disorders. Due to its Clq like domain, zacrp3 and zacrp3-containing fusion proteins may be useful as antimicrobial agents, promoting lysis or phagocytosis of infectious proteins, antibodies and activity modulators may also be used to inhibit collagen-induced platelet aggregation, adhesion, or activation, and may therefore have potential for promoting blood flow within the vasculature of therefore have potential for promoting blood flow within the vasculature of the promotine as manners.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel zacrp3 polypeptides used to treat or prevent bacterial or viral infections, for wound healing, improving blood flow, and to analyze energy efficiency in mammals -
                                                            Human zacrp3; adipocyte complement related protein homologue; ACRP30; Clq domain; collagen-like domain; energy balance modulation; cellular metabolism; metabolism; decetion; discrete; obesity; anorexia antimicrobial agent; infection; platelet aggregation inhibition; adhesion; activation; vascular injury; antibacterial; antiviral; ds.
                  Human zacrp3 degenerate DNA, SEQ ID NO:10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 10; Page 115; 123pp; English.
                                                                                                                                                                                                                                                                                                                                                      19-APR-2000; 2000WO-US10454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piddington CS, Bishop PD;
                                                                                                                                                                                                                                                                                                                                                                                                                                             (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-665243/64.
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                                                                                                                                                                                                                      Synthetic.
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Sequence 738 BP; 130 A; 74 C; 145 G; 99 T; 290 other;

degenerate DNA seguence encoding human zacrp3.

dimerisation

of a mammal e.g., to treat injury to the vasculature or other collagenous tissue. Human zacrp3 and its antibodies may additionally be used to study

and oliqomerisation. The present sequence represents a

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738
205
0
41
0
     Length:
Matches:
Conservative:
Mismatches:
Indels:
      2.7e-84
1171.00
83.33%
83.33%
85.66%
                               Best Local Similarity:
Query Match:
                       Percent Similarity:
Alignment Scores:
                Score:
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US-10-036-041-2 (1-246) x AAC64063 (1-738)

- 20 9 1 MetLeuTrpArgGlnLeuIleTyrTrpGlnLeuLeuAlaLeuPheHeUProPheCys ò qq
- 21 LeuCysGlnAspGluTyrMetGluSerProGlnThrGlyGlyLeuProProAspCysSer 40

qa	61	
Qy	41	LysCysCysHisGlyAspTyrSerPheArgGlyTyrGlnGlyProProGlyProProGly 60
Οy	61	ProProGlyleProGlyAsnHisGlyAsnAsnGlyAsnAsnGlyAlaThrGlyHisGlu 80
qq	181	CCNCCNGGNATHCCNGGNAAYCAYGGNAAYAAYGGNAAYAAYGGNGCNACNGGNCAYGAR 240
ν ·	81	GlyAlaLysGlyGluLysGlyAspLeuGlyProArgGlyGluArgGlyGln 100
qa	241	GGNGCNAARGGNGARAARGGNGAYAARGGNGAYTNGGNCCNMGNGGNGARMGNGGNCAR 300
ΟŸ	101	HisGlyProLysGlyGluLysGlyTyrProGlyIleProProGluLeuGlnIleAlaPhe 120
QQ	301	CAYGGNCCNAARGGNGARAARGGNTAYCCNGGNATHCCNCCNGARYTNCARATHGCNTTY 360
δy	121	MetalaSerLeualaThrHisPheSerAsnGlnAsnSerGlyIJeIJePheSerSerVal 140
Op	361	AIGGCNWSNYINGCNACNCAYTYWSNAAYCARAAYWSNGGNATHATHTYWSNWSNGTN 420
QY	141	GluThrasnIleGlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSer 160
qq	421	GARACNAAYATHGGNAAYTTYTTYGAYGTNATGACNGGNMGNTTYGGNGCNCCNGTNWSN 480
ΟŸ	161	GlyValTyrPhePheThrPheSerMetMetLysHisGluAspValGluGluValTyrVal 180
Q	481	GGNGTNTAYTTYTTYACNTTYWSNATGATGAARCAYGARGAYGTNGARGARGTNTAYGTN 540
ογ	181	TyrLeuMetHisAsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLys 200
QQ	541	TAYYTNATGCAYAAYGGNAAYACNGTNTTYWSNATGTAYWSNTAYGARATGAARGGNAAR 600
Qy	201	SerAspThrSerSerAsnHisAlaValLeuLysLeuAlaLysGlyAspGluValTrpLeu 220
qq	601	WSNGAYACNWSNWSNAAYCAYGCNGTNYTNAARYTNGCNAARGGNGAYGARGTNTGGYTN 660
Óγ	221	ArgMetGlyAsnGlyAlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPhe 240
QQ	661	MGNATGGGNAAYGGNGCNYTNCAYGGNGAYCAYCARMGNTTYWSNACNTTYGCNGGNTTY 720
QY	241	LeuLeuPheGluThrLys 246
qq	721	YTNYTNT
RESI	RESULT 21 AAI61016/c	
T X	AAI61016	standard; cDNA; 1799 BP.
, A	AAI6101	1016;
VV LO	22-0	-OCT-2001 (first entry)
OE	Human	n polynucleotide SEQ ID NO 5005.
X X KW	Human;	ant;
KW	peri Alzh	eral nervous system; neuropathy; central nervous system; mer's; Parkinson's disease; Huntington's disease; haemost
KW	amyo	hy-Dr
X X	leuk	screening, architects,
S S	НОШО	sapiens.
V A	WO20	WO200153312-A1.
Z G 3	26-7	-JUL-2001.
P. Y	26-D	-DEC-2000; 2000MO-US34263.
PR	21-J	21-JAN-2000; 2000US-048B725.

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the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activinibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, and diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence data for this patent did not form part of the printed
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                                                                                                                                                                                                                                                                                                                                The invention relates to human nucleic acids (AAI57798-AAI61369) and
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                                                                                                                                                        Wang
                                                                                                                                                                                                                                                       Novel nucleic acids and polypeptides, useful for treating disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77 ThrGlyHisGluGlyAlaLysGlyGluLysGlyAspLysGlyAspLeuGlyProArgGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1618 ATTCTCTTGCCTCAACCTCTGGAGTAGCTGGGATTACAGATTGCATTCATGGCTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AlaThrHisPheSerAsnGlnAsnSerGlyIleIlePheSerSerValGluThrAsnIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSerGlyValTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1678 TCAGGCTGGAGTGCAGTGGTGTGATCTTGGCTCACTGCAGCCTCCACCAAGGTTCAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------GlnIleAlaPheMetAlaSerLeu
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Zhang J
                                                                                                                                                      Qian XB,
Yang Y,
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Mismatches:
                                                                                                                                                   ten R, Ma Y, (
tu C, Xue AJ,
Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches:
                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 5005; 10078pp; English.
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                                                                                                                                                                                                                                                                         such as central nervous system injuries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-036-041-2 (1-246) x AA161016 (1-1799)
                                                                                                                                                     Chen R,
                                                                                                                                                                   Xu C,
                                                                                                                                                   Asundi V, Cher
Wehrman T, Xu
Goodrich R, I
                                           20000S-0653450.
20000S-0662191.
20000S-0693036.
20000S-0727344.
               2000US-0598042.
2000US-0620312.
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858.50
83.66%
83.66%
62.80%
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                                                                                                                                                  Liu C, A
Wang 2, W
Zhou P,
                                                                                                                      (HYSE-) HYSEQ INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1799
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 25-APR-2000;
09-JUL-2000;
                                                                                       29-NOV-2000;
                               19-JUL-2000;
                                                         14-SEP-2000;
                                              03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                Tang YT,
Wang J, W
Zhao QA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
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Human; secreted protein; gene; ss; nutritional supplement; haemophilla; viral infection; bacterial infection; fungal infection; diabetes; asthma; autoimmune disorder; rhematoid arthritis; multiple sclerosis; tumour; autoimmune thyroiditis; alleajoi reaction; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; liver fibrosis; cancer; ulcer; coagulation disorder; inflammatory disorder; crohn's disease; incision; tissue regeneration; wound healing; burn; haematopoiesis; myeloid cell deficiency; lymphoid cell deficiency.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 derived from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to 592 polynucleotides which have been derived from a variety of human tissue sources and which encode novel secreted proteins. The polynucleotides can be used as probes for the identification and isolation of full length cDNA and genomic DNA. The polynucleotides and proteins can also be used as nutritional supplements. The proteins are useful in the treatment of various immune deficiencies and disorders such as viral infections, bacterial infections, fungal infections, autoimmune disorders (e.g. rheumatoid arthritis, multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Five hundred and ninety two polynucleotides derived from a variety of . human tissue sources which encode secreted proteins, useful for treating immune deficiencies and disorders such as autoimmune disorders
                                                       1258 GGCGCTCTCCATGGGGACCACCAACGCTTCTCAACGATTCCTAGAA 1199
GGAAACTICITIGAIGICAIGACIGGIAGATITGGGGCCCCCAGIAICAGGIGIGIATITC 1439
                                                                                                                                           AATGGCAACACAGTCTTCAGCATGTACAGCTATGAAATGAAGGGCAAATCAGATACATCC 1319
                                 PheThrPheSerMetMetLysHisGluAspValGluGluValTyrValTyrLeuMetHis 184
                                                                                                                                                                                   224
                                                                                                                                                                                                                                                    GlyAlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPheLeuLeuPheGlu 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83;
                                                                                                                                                                                 SerAsnHisAlaValLeuLysLeuAlaLysGlyAspGluValTrpLeuArgMetGlyAsn
                                                                                                                                                                                                  AsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLysSerAspThrSer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human cDNA encoding secreted protein #359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 261-262; 372pp; English.
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K, Graham JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-179321/23
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sclerosis, autoimmune thyroiditis and diabetes) and allergic reactions and conditions (e.g. asthma). They are also useful for treating neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), liver fibrosis, coagulation disorders (e.g. haemophilia), inflammatory disorders (e.g. Crohn's disease) and tumours. They are also burns, incisions and ulcers. The proteins are also useful for tissue regeneration, for wound healing and in the treatment of haematopolesis and for treating myeloid or lymphoid cell deficiencies. Sequences ABK34863-ABK35454 represent polynucleotides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tag; secreted protein; cDNA isolation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                     167
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                                                                                                                                                                                                                                                                                        127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  362 GCTGTGCTGAAGCTAGCCAAAGGGGATGAGGTTTGGCTGCGAATGGGCAATGGCGCTCTC
                                                                                                                                                                                                                                                                                                                                    PheSerAsnGlnAsnSerGlyIleIlePheSerSerValGluThrAsnIleGlyAsnPhe
                                                                                                                                                                                                                                                                                                                                                                             148 PheAspValMetThrGlyArgPheGlyAlaProValSerGlyValTyrPhePheThrPhe
                                                                                                                                                                                                                                                                                                                                                                                          182 TTGATGTCATGACTGGTAGATTTGGGGCCCCAGTATCAGGTGTGTATTCTTCACCTTC
                                                                                                            Sequence 1608 BP; 487 A; 305 C; 339 G; 477 T; 0 other;
                                                                                                                                            1608
159
0
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0
                                                                                                                                                      Matches:
Conservative:
Mismatches:
Indels:
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                                                                                                                                             Length:
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                                                                                                                                            2.43e-58
849.00
100.00%
100.00%
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                                                                                                                                                                  Similarity:
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gene therapy;
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                                                                                                                                   Alignment Scores:
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DB:
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No.:
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The present sequence is one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. An ORF has been identified within the sequence. The 5' ESTs were prepared from Lotal human RNAs or poly4+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used to obtain full length etherapy and chromosome mapping procedures. They are used to obtain upstream regulatory sequences and to design expression and secretion
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                                                                                                                                          New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
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                                                                                                                                        tag (5' EST) for
to 5'ESTs and for
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127
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Matches:
Conservative:
Mismatches:
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                                                                                                                                                                                             Claim 1; SEQ ID 2872; 71pp + CD-ROM; English
                                                                           Giordano
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                                                                             Duclert A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         8.56e-49
721.00
99.22%
99.22%
52.74%
21-FEB-2000; 2000EP-0200610.
                                                                             ,
                                                                           Dumas Milne Edwards
                                                                                                     WPI; 2000-500381/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                 P-PSDB; AAG02868
                                                   (GEST ) GENSET
                         26-FEB-1999;
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human secreted proteins, and encode the proteins given in AAX19374 to human secreted proteins, and encode the proteins given in AAX11374 to human secreted proteins, and encode the proteins given in AAX11374 to AAX11531, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted buman gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proteins obtained may have cytokine activity, cell proliferation/differentiation activity, haematopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity on other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a cell.
                                                                                                                                                                      Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy: chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acids encoding human secreted - proteins obtained from cDNA libraries prepared from substantia nigra, cerebellum, surrenals and fetal brain tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 472 BP; 108 A; 130 C; 134 G; 99 T; 1 other;
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                                                                                                                              Human secreted protein 5' EST SEQ ID No 149.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 263; 434pp; English.
                   ВР
               . AAX39551 standard; DNA; 472
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                                                                                           (first entry)
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P-PSDB; AAX11485.
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                                                                                                                                                                                                                                                                                                                                       WO9906551-A2
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                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                           21-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Duclert A,
                                                       AAX39551;
AAX39551
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Alignment Scores: 8.58e-49 Length: 472

Pred. No.: 721.00 Matches: 127

Score: 721.00 Matches: 127

Percent Similarity: 99.23 Mismatches: 1

Best Local Similarity: 99.23 Indels: 1

52.74\$ Indels: 0

Gaps: 0

US-10-036-041-2 (1-246) x AAX39551 (1-472)

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Sequences AAF93180 - AAF93743 represent polynucleotide sequences encoding human SRT proteins. The cDNA sequences are isolated from various different human tissue cDNA libraries. The invention relates to a method for detecting cDNA encoding an SRT protein, a vector containing cDNA encoding SRT, a host cell transformed with the vector, an isolated SRT polypeptide, and an antibody which binds to SRT. The polynucleotide sequence can be used in agent therapy and is useful in the recombinant production of SRT polypeptides, as a hybridisation probe to screen libraries to isolate cDNAs with sequence identity to SRT polypeptides, to map the gene encoding the SRT polypeptides and analysing genetic polynucleotide sequences can be used in polymerase chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         useful
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                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA encoding SRT protein isolated from prostate tissue SEQ ID 240.
ProProGlyIleProGlyAsnHisGlyAsnAsnGlyAsnAsnGlyAlaThrGlyHisGlu
                                                                                                                                                                                329 GGAGCCAAAGGTGAGAAGGCGACAAAGGTGACCTGGGGCCTCGAGGGGAGCGGGGGCAG
                                                   LysCysCysHisGlyAspTyrSerPheArgGlyTyrGlnGlyProProGlyProProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid molecule encoding a SRT polypeptide is for production of recombinant SRT polypeptides, gene mapping, diagnosing genetic disorders and for gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; SRT; gene therapy; gene mapping; tissue typing; ss.
                                                                                                                                                                                                                                                              MetAlaSerLeuAlaThrHisPhe 128
                                                                                                                                                                                                                                                                          449 ATGCTTCTCGGM-ACCCACTTC 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Fig 240; 663pp; English.
                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wood WI;
                                                                                                                                                                                                                                                                                                                                            AAF93419 standard; cDNA; 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0145701.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUL-2000; 2000WO-US20006
                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-112729/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200107611-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                     AAF93419;
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inflammatory disorder; neurological disorder; haematopoietic disorder; skeletal developmental disorder; growth abnormality; autoimmune disorder; neurodegenerative disorder; nervous system disorder; bacterial infection; peripheral myelinopathy; viral infection; cancer; obesity; diabetes; hypotension; sexual development disorder; blood disorder; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                             276
                                                                                                                                                                                                                                                                                                                                                                                                                                                             516
                                                                                                                                                                                                                                        157 GTGCAAAGCCACCAGCAGACTGGCCGTAGCGGCTCCAGGAGGGAAAAGTGAGAGAGGGG 216
                                                                                                                                                                                                                                                                                                                              CCAGATGAGCTACCGCACCCCGAGGTAGATGACCTAGCCCAGATCACCACATTCTGGGGC 336
                                                                                                                                                                                                                                                                                                                                                                         CAGINICCACAAACCGGAGGACIACCCCCAGACIGCAGIAAGIGITGICAIGGAGACIAC 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gene encoding novel human secreted or membrane-associated protein #17
                                                                                                                                                                                                                                                                                                                                                    47
                                                                                                                                                                                                                                                                                                                                                                                                                                        87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; secreted protein; membrane-associated protein; hypertension;
                                                                                                                             217 AGCCATCCTAAAACTGGGACTGTGGATAATAACACTTNTACAGACCTAAAATCCCTGAGA
                                                                                                                                                                                   ---SerProGlnThrGlyGlyCeuProProAspCysSerLysCysCysHisGlyAspTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                        HisGlyAsnAsnGlyAsnAsnGlyAlaThrGlyHisGluGlyAlaLysGlyGluLysGly
other;
                              546
94
0
3
73
                              Length:
Matches:
Conservative:
Mismatches:
Indels:
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G; 108
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                                                                                                         US-10-036-041-2 (1-246) x AAF93419 (1-546)
                                                                                                                                                                         LeuCysGlnAspGluTyrMetGlu----
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                              3.02e-32
513.50
55.29%
55.29%
37.56%
A; 129
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149
                                                    Percent Similarity:
Best Local Similarity:
BP;
Sequence 546
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                     Alignment Scores:
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                                                                         Query Match:
DB:
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The present invention relates to the isolation of novel human secreted or membrane-associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. setletal developmental disorders, growth abnormalities, neurodegenerative disorders (e.g. Huntington's disease), nervous system disorders, autoimmune disorders (e.g. rheumatoid arthritis), peripheral myelinopathies, viral and bacterial infections, hyper- and hypotension, obesity, bulimia, anorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental or sexual development disorders, and dysfunctions of the blood cascade system including those leading to stroke. ABK33569 appresent the genes encoding the novel human secreted or membrane-associated
                                                                                                                                                                                                                         secreted and membrane-associated polypeptides and polynucleotides ing the polypeptides, for preventing, treating and ameliorating rs, mental or sexual developmental disorders, and malignant tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91 GTGTGCGACCCGCATGGGCCCCGTGGCCCTGGTCCCGACGCGCGCCTGCTTCCGTGCCC 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        151 cccrrcccccaggcgccaagggagaggrgggcgggggggaaaggaggccrggggg 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strum JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55 ProProGlyProProGlyProProGlyIleProGlyAsnHisGlyAsnAsnGlyAsnAsn 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75 GlyAlaThrGlyHisGluGlyAlaLysGlyGluLysGlyAspLysGlyAspLeuGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----ProAspCysSerLysCysCysHisGlyAspTyrSerPheArgGlyTyrGlnGly
                                                                                                                      SK,
                                                                                                                      Rizvi
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82
35
100
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Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                      Martensen SA,
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                                                                                                                                                                                                                                                                                                              Page 110; 151pp; English.
                                                                                                                        ۲,
                                                (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LTD.
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325.00
48.55%
34.02%
23.77%
2000US-218033P
2000US-226517P
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                                                                                                                    Cogswell JP,
Xiang Z, Xie
                                                                                                                                                                       WPI; 2002-188468/24
P-PSDB; AAU84378.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
 12-JUL-2000;
21-AUG-2000;
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                                                                                                                                     Smith RF,
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385 GIGGCGCCCGCTGCCGCTACGTGCCT------CGCATTGCTTTCTACGCGGCCTG 435

---IleProProGluLeuGlnIleAlaPheMetAlaSerLeu

112

95 ArgGlyGluArgGlyGlnHisGlyProLysGlyGluLysGlyTyrProGly-

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Murison JG;
                                                                                                         183
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125 AlaThrHisPheSerAsnGlnAsnSerGlyIleIlePheSerSerValGluThrAsnIle 144
                                                                                                                                                                                                                                                                                cell;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast; embryonic skin cell; keratinocyte stem cell; transit amplifying cell secreted; transmembrane; infammation; cancer; neurological disease; anglogenesis; tumour vascularisation; growth disorder; developmental disorder; skin wound; hair follicle disorder;
                                                                                                                                                         184 HisAsnGlyAsnThrValPheSerMetTyrSerTyrGluMetLysGlyLysSerAspThr
                                                                                                                                                                                                                               CGCCGCCCCCACGAGGTTACGAGGTG---CTGCGCTTCGACGACGTGGTGACCAACGTG
                                                 GlyAsnPhePheAspValMetThrGlyArgPheGlyAlaProValSerGlyValTyrPhe
                                                                PheThrPheSer -- - MetMetLysHisGluAspValGluGluValTyrValTyrLeuMet
                                                                                                                                553 TTCGCTTACCACGTGCTCTATGCGCGGCGGCGCCACCAGCATGTGGGCCCGACCTCATG
                                                                                                                                                                                     613 AAGAACGGACAGGTCCGGGCCAGCGCCATTGCTCAGGACGGGGGCCAGAACTACGACTAC
                                                                                                                                                                                                               SerSerAsnHisAlaValLeuLysLeuAlaLysGlyAspGluValTrpLeuArgMetGly
                                                                                                                                                                                                                                                                   224 AsnGlyAlaLeuHisGlyAspHis---GlnArgPheSerThrPheAlaGlyPheLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA encoding rat skin cell secreted protein, SEQ ID NO:217.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GENE-) GENESIS RES & DEV CORP LTD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                 793 TAC 795
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cancer cells, to modulate angiogenesis and tumour vascularisation, to modulate skin inflammation, to modulate epithelial cell growth and to inhibit binding of HIV-1 to leukcytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences AAZ61606-Z61832 represent cDNA sequences derived from several mouse, rat or human skin cell types. Sequences derived AAZ61606-Z61649, AAZ61725-Z61765, AAZ61802-Z61811 and AAZ6182 encode proteins with an N-terminal signal sequence, indicating that the proteins are secreted. Sequences AAZ61650-Z61868, AAZ61766-Z61780, AAZ61812-Z61817 and AAZ61827-Z61829 encode proteins with one or more putative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
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growth and motility of keratinocytes, to inhibit the growth of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 LeuIleTyrTrpGlnLeuLeuAlaLeuPhePheLeuProPheCysLeuCysGlnAspGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222 CCAATGCTTGGTGCCTTTGCTCGCAGGGACTTCCAGAAGGGTGGTCCTCAACTGGTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerLysCysCysHisGlyAspTyrSerPheArgGlyTyrGlnGlyProProGlyProPro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        429 AGGACAGGCAACCGAGGAAAACAAGGACCAAAGGGCAAAGCTGGGGCCATTGGGAGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTCCTCGAGGACCCAAGGGGGTCAGTGGTACCCCCGGGAAACATGGTATACCGGGCAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   282 AGT-----CTGCCTGGTCCCCAAGGCCCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCGAGCCAAGTCGGCCTTTTCGGTGGCGGTAACCAAGAGTTACCCCACGTGAGCGACTG
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                                                                                                                                                                                                                                        328 G; 208 T; 0 other;
                                                                                                                                                                                                                                                                                            1107
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316.00
42.62%
28.86%
23.12%
                                                                                                                                                                                                     transmembrane domains.
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789

dermal papilla, human keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocyte stem cells and transit amplifying cells. Polypeptides of the invention may be used to treat inflammation, cancer and neurological diseases. The proteins may be used to stimulate The invention relates to novel nucleic acid sequences derived from rat

LeuileTyrTrpGlnLeuLeuAlaLeuPhePheLeuProPheCysLeuCysGlnAspGlu

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The present polynucleotide encodes a polypeptide which is expressed in mammalian skin cells. The polypeptide is useful for stimulating metating stratinocyte growth and motility, inhibiting the growth of cancer cells, modulating angiogenesis, inhibiting angiogenesis and vascularisation of tumours, modulating skin inflammation, stimulating the growth of epithelial cells, inhibiting the binding of human immunodeficiency virus (HIV)-1 to leukocytes, and treating inflammatory disease, cancer and neurological diseases. The polynucleotide can be used as a marker, in the identification of genetic disorders, and for the design of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murison JG;
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209
                                                                                               947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated polynucleotide used in the identification of genetic disorders and encoding polypeptides used for treating inflammatory disease, cancer and neurological diseases
SerMetTyrSerTyrGluMetLys---GlyLysSerAspThrSerSerAsnHisAlaVal
                               828 CGCATTCGGACTTTTGACGCCAACACCGGCAACCACGACGTGGCCTCGGGCTCCACCATC
                                                                 --GlyAsnGly
                                                                                           CTAGCTCTCAAGGAGGGTGATGAAGTCTGGTTACAGATTTTCTACTCGGAGCAGAATGGA
                                                                                                                                                                                                                                                                                                                                                                                 nootropic; neuroprotective; vulnerary; immunomodulatory; vaccine; keratinocyte growth stimulation; cancer; angiogenesis inhibition; inflammation; neurological disease; ss.
                                                                                                                                                 948 CICITCIACGACCCITATIGGACCGACAGCCIGITCACCGGCTICCICATCIAC 1001
                                                                                                                                226 AlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPheLeuLeuPhe 243
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                                                                                                                                                                                                                                                                                                                                                                     Rat; skin cell; cytostatic; antiinflammatory; anti-HIV;
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                                                                 LeuLysLeuAlaLysGlyAspGluValTrpLeuArgMet--
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                                                                                                                                                                                                                                   BP
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                                                                                                                                                                                                                                                                                                                                    Skin cell cDNA, SEQ ID NO: 217
                                                                                                                                                                                                                                 AAC99677 standard; cDNA; 1107
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Matches: Conservative: Mismatches: Indels:

316.00 42.628 28.868 23.128

Best Local Similarity:

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Percent Similarity

Score:

Alignment Scores:

Gaps:

US-10-036-041-2 (1-246) x AAC99677 (1-1107)

Length:

3.28e-16

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Human; rat; mouse; skin cell; skin wound; cancer; growth defect; developmental defect; inflammatory disease; dermatological; vulnerary; immunomodulator; anti-inflammatory; cytostatic; neuroprotective; gene;
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174 ATGATCTCCTGGATGCTCTTGGCCTGT---GCCCTTCCG-----TGTGCTGCTGAC
                                                   222 CCAATGCTTGGTGCCTTTGCTCGCAGGGACTTCCAGAAGGGTGGTCCTCAACTGGTGTGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgPheGlyAlaProValSerGlyValTyrPhePheThrPheSerMetMet------
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                                                                              SerLysCysCysHisGlyAspTyrSerPheArgGlyTyrGlnGlyProProPro
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Location/Qualifiers
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2000US-0186084.
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29-FEB-2000;
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                                                                                                                                                                                                                                                                                                                                                                          isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth defects, developmental defects and inflammatory diseases. The proteins have important roles in the induction of hair growth, cell proliferation and cell-cell interaction, in maintaining tissue integrity, in wound healing and in modulating immune responses. The present sequence is a
                                                                                                                                                                                                                                                                                                                                                                present invention provides the protein and coding sequences of cDNAs
                                                                                                                                                                                                             Kumble KD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlyProProGlyIleProGlyAsnHisGlyAsnAsnGlyAsnAsnGlyAlaThrGlyHis 79
                                                                                                                                                                                                                                                                polynucleotides and polypeptides encoded by the polynucleotides
                                                                                                                                                                                                                                                                               isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----GluSerProGlnThrGlyGlyLeuProProAspCys
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                                                                                                                                                                                                           Murison JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1107 BP; 273 A; 298 C; 328 G; 208 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 161; 466pp; English.
                                                                                                                                                                                (GENE-) GENESIS RES & DEV CORP
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316.00
42.62%
28.86%
                                                                                                                                                                                                                                                                                                          modulating immune responses
                                                                                                           24-MAY-2001; 2001WO-NZ00099
                                                                                                                                      2000US-206650P
                                                                                                                                                    2000US-221232P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282 AGT-----
                                                                                                                                                                                                                                    WPI; 2002-122020/16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26 TyrMet-----
                                                    WO200190357-A1.
                                                                                                                                                    25-JUL-2000;
                                                                                                                                      24-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                29-NOV-2001
                                                                                                                                                                                                           Watson JD,
                             Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
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ALS; Zollinger-Ellison syndrome; immune system disease; schizophrenia; inflammation; haematopoietic disease; anxiety; feeding disorder; aging; anoraxis; depression; cardicovascular disease; sleep disorder; selzure; memory alteration; migraine; stroke; asthma; neuropathy; hypoglycaemia; sexual disorder; growth abnormality; infection; autoimmune disease; rheumatoid arthritis; cataractogenesis; angiogenesis; atherosclerosis; cerebral ischemenia; cirrhosis; huntingfon's disease; hypercholesterolaemia; headache; amnesia; cardiac arrhythmia; obesity; diabetes mellitus; glomerulonephritis; renovascular hypertension; cancer; vaccine; gene therapy; SBhACRP30a gene; ds.
                                                                                                                                                                                    608
                                                                                                                                                                                                                                                                                                                                            899
                                                                                                                                                                                                                                                                                                                                                                                                                          153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        728
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                729 AAGTTCGTCTGCAGCGTGCCAGGGATCTATTACTTTACCTATGACATTACGCTGGCCAAC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysHisGluAspValGluGluValTyrValTyrLeuMetHisAsnGlyAsnThrValPhe 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  191 SerMetTyrSerTyrGluMetLys---GlyLysSerAspThrSerSerAsnHisAlaVal 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        888 CTAGCICICAAGGAGGGIGAIGAAGICIGGITACAGAITITICIACICGGAGCAGAAIGGA 947
549 AAGGGACCTAAGGGCAAGAAAGGGGAACCTGGGCTCCCAGGCCCCTGTAGCTGCGCGCAGT
                                                                                                                                                                                                                                                                                                                                            609 AGCCGAGCCAAGTCGGCCTTTTCGGTGCGGGTAACCAAGAGTTACCCACGTGAGCGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    669 CCCATCAAGTTTGACAAGATTCTGATGAATGAGGGAGGCCACTACAATGCATCCAGTGGC
                                                                                                                                                                                                                                                                  ProGluLeuGlnIleAlaPheMetAlaSerLeuAlaThrHisPheSerAsnGlnAsnSer
                                                                                                                                                                                                                                                                                                                                                                                                                      134 GlyIleIlePheSerSerValGluThrAsnIleGlyAsnPhePheAspValMetThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    789 AAACAC------CTGGCCATCGGCCTAGTGCAATGGCCAG----TAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            828 CGCATTCGGACTTTTGACGCCAACACCGGCAACCACGACGTGGCCTCGGGCTCCACCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlyAsnGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   226 AlaLeuHisGlyAspHisGlnArgPheSerThrPheAlaGlyPheLeuLeuPhe 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  154 ArgPheGlyAlaProValSerGlyValTyrPhePheThrPheSerMetMet---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/product= "Human SBhACRP30a protein #1"
/transl_except= (pos:235..243, aa:Ala-Leu)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuLysLeuAlaLysGlyAspGluValTrpLeuArgMet---
                                                                                                      HisGlyProLysGlyGluLysGlyTyrProGlyIlePro-
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and nucleic acid molecules encoding such polypeptides. Sequences of the invention are useful for treating diseases such as Alzheimer's disease, amyotrophic lateral sclerosis (ALS), Zollinger-Ellison syndrome, diseases of the immune system, haematopoietric disease, inflammation, anxiety, schizophrenia, feeding disorders, anorexia, depression, social, sexual and rewarded behaviour, cardiovascular disease, sleep disorder, learning
                                                                                                                                                                                                                                                                                                                                                                  New secreted and membrane associated polypeptides for treating Alzheimer's disease, psoriasis, cancer, enterocolitis, sleep and sexual disorders, stroke, and asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ntion are used to identify membrane bound and soluble receptors.

are also useful as vaccines for inducing an immunological response mammal. Polynucleotides of the invention are used in a are also usinship.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and memory alteration and altered immune response, seizure, migraine, cancer, stroke, asthma, neuropathy, aging, sexual disorders, treatment of transsexuals, growth abnormalities, obesity, infections, autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amnesia, multiple sclerosis, Hodgson's disease, dilated cardiomyopathy. congestive heart failure, cardiac arrhythmias, hypercholesterolaemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  congestive heart failure, cardiac arrhythmias, hypercholesterolaemia, viral and non-viral hepatitis, type I and type II diabetes mellitus, glomerulonephritis, renovascular hypertension, hypoglycaemia, periodic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LIN & MEMORIAL POLYNUCLECTIDES Of the invention are used in gene therapy. They are also valuable for chromosome localisation studies and tissue expression studies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention relates to secreted and membrane associated polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          headache
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases (e.g. rheumatoid arthritis), cataractogenesis, angiogenesis, disorders associated with healthy maintenance of gastric mucosa and
                                                                                                                                                                                                        Xiang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repair of acute and chronic mucosal lesion, lung carcinoma, cerebral
ischaemia, atherosclerosis, cirrhosis, Huntington's disease, headach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ne present sequence is a gene encoding human SBhACRP30a protein, secreted protein of the invention.
                                                                                                                                                                                                    Murdoch PR, Rizvi SK, Smith RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            paralyses, tendinitis and malignant hyperthermia. Invention are used to identify membrane bound and
                                                                                                  (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Page 41; 94pp; English
18-APR-2000; 2000US-0198583
04-OCT-2000; 2000US-0237963
                                                                                                                                                                                                 Agarwal P, Kabnick KS,
                                                                                                                                                                                                                                                                    WPI; 2001-536566/59.
P-PSDB; AAE09443.
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121 GGACCTCCAGGGCCCCCTGGAGCAAATGGTTCCCCTGGGCCCCATGGTCGCATCGGCCTT 180 GGAGAGAACTACTCCCCCAGGTATATCTGC------AGCATTCCTGGCTTGCCT 120 81 CCAGGAAGAGATGGTAGAGACGGCAGGAAAGGAGAAAGGTGAAAAGGGAACTGCAGGT 240 13 CTCTATGTTACAAGTTTTGCCATTGTGCCAGTGGACAACCCCGGGGTAATCAGTTGAAA 72 GlyProProGlyProProGlyProProGlyIleProGlyAsnHisGlyAsnAsnGlyAsn 73 14 LeuPhePheLeuProPheCysLeuCysGlnAspGluTyrMetGluSerProGlnThrGly 33 34 GlyLeuProProAspCysSerLysCysCysHisGlyAspTyrSerPheArgGlyTyrGln 74 AsnGlyAlaThrGlyHisGluĠlyAlaLySGlyGluLySGlyAsp----Sequence 870 BP; 239 A; 200 C; 237 G; 194 T; 0 other; Length:
Matches:
Conservative:
Mismatches:
Indels: Gaps: US-10-036-041-2 (1-246) x AAD16350 (1-870) 2.98e-16 315.00 41.26% 30.07% · 23.04% Percent Similarity: Best Local Similarity: Query Match: DB: Alignment Scores:

73 54

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Pred.

qa	241	241 TTGAGAGGTAAGACTGGACCGCTAGGTCTTGCCGGTGAGAAAGGGGACCAAGGAGAGACT 30	300
Oy	89	89LysGlyAspLeuGlyProArgGlyGluArgGlyGlnHisGlyPro 10	103
Dp	301		360
ογ	104	104	114
οp	361		420
Qy	115	GluLeuGlnIleAlaPheMetAlaSerLeuAlaThrHisPheSerAsn 1	130
Op	421		480
Qy	131	GlnAsnSerGlyIleIlePheSerSerValGluThrAsnIleGlyAsnPhePheAspVal 1	150
da,	481		540
Qy	151		170
Q	541	::: GCCACAGGGAAGTTCATCTGTGCTTTCCCAGGGATCTATTACTTTTCTTATGATATCACA	009
Qy	171		187
qq	601	TTGGCTAATAAGGATCTGGCAATCGGAATCGGTACAATAGGG 6	642
νoγ	188		201
QQ	643		684
οy	202	ASpThrSerSerAsnHisAlaValLeuLysLeuAlaLysGlyAspGluValTrpLeuArg 221	221
qq	685		744
٥٧	222	MetGlyAsnGlyAlaLeuHisGlyAspHisGlnArgPheSerThrPhe	237
QQ	745	ATTITCTICACAGACCAGAATGGCCICTTCTCAGACCCAGGTTGGGCAGACAGCTTATTC	804
VO	238	AlaGlyPheLeuLeuPhe 243	
QQ	808	TCCGGGTTTCTCTTATAC 822	
Sear	ch cor time	Search completed: March 13, 2003, 18:19:54 Job time : 280 secs	

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The present sequence is one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. An ORF has been identified within the sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures. They are used to obtain upper man regulatory sequences and to design expression and secretion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vectors.
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Sequence 471 BP; 107 A; 130 C; 134 G; 99 T; 1 other;

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                               0; Gaps
 Score 452; DB 21; Length 471; Pred. No. 4.4e-121; 1; Mismatches 1; Indels (
 26.48;
Query Match
Best Local Similarity 99.6
Matches 452; Conservative
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GGCATCTGCCCGAGGAGCCACGCTCCTGGAGCTCTGCTGTTCTCAGGGAGACTCTGA 60 GGCATCTGCCCGAGGAGCACCACGCTCCTGGAGCTCTGCTGTTCTCAGGGAGACTCTGA 71 12

8 셤

- GGCTCTGTTGAGAATCATGCTTTGGAGGCAGCTCATCTATTGGCAACTGCTGGCTTTGTT 120 61 72 *_,*& g
- TTTCCTCCCTTTTTGCCTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACT 180 121 8

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- 132
- ACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACAGCTTTCGAGGCTACCAAGGCCC 240 181
- CCCTGGGCCACCGGGCCCTCCTGGCATTCCAGGAAACCATGGAAACAATGGCAACAATGG 300 ACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACAGCTTTCGAGGCTACCAAGGCCC 251 192 241

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- 252
- AGCCACTGGTCATGAAGGAGCCAAAGGTGAGAAGGGGGGACAAAGGTGACCTGGGGGCCTCG 360 301 312
- AGGGGAGCGGGGCAGCATGGCCCCAAAGGAGAGAGAGGGCTACCCGGGGATTCCACCAGA 420 372 AGGGAGCGGGGCAGCATGGCCCCAAAGGAGAGAGGGCTACCCGGGGATTCCACCAGA 431
- ACTICAGAITGCAITCAIGGCIICICIGGCAACC 454 421

6- Homo

802

pharm Human Human

Eandard; DNA; 472 AAX39551

551

AAX39551;

21-JUN-1999 (first entry)

ABV5678?

17-SEP

LT. 26 ABV56781

uman secreted protein 5' EST SEQ ID No 149

uman; secreted protein; EST; expressed sequence tag; diagnosis; orensic; gene therapy; chromosome mapping; signal peptide; pstream regulatory sequence; cytokine activity; cell proliferation; ifferentiation; haematopoiesis regulation; tissue growth regulation; productive hormone regulation; chemotactic; chemotactic; haemostatic; prombolytic; anti-inflammatory; tumour inhibition; ds. 421 ACTTCA 433 ACTTCI

sapiens

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human secreted proteins, and encode the proteins given in AAY11374 to human secreted proteins, and encode the proteins given in AAY11374 to AAX1151, respectively. The proteins given in AAX11374 to and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, call proliferation/differentiation activity, haematopoiesis requiating activity, tissue growth regulating activity, reproductive hormone regulating activity, chemotactic/ chemokinetic activity, haemostatic and thrombolytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a cell.
                                                                                                                                                                                                                                                                                                                New nucleic acids encoding human secreted · proteins obtained from cDNA libraries prepared from substantia nigra, cerebellum, surrenals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 472 BP; 108 A; 130 C; 134 G; 99 T; 1 other;
                                                                                                                                                                                                              Lacroix
                                                                                                                                                                                                              Duclert A, Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 263; 434pp; English
                                                                                  98WO-IB01235
                                                                                                                        97US-0905133
                                                                                                                                                                                                                                                                                                                                                             and fetal brain tissue
                                                                                                                                                                                                                                                    WPI; 1999-153781/13.
                                                                                                                                                                                                                                                                          P-PSDB; AAY11485
                                                                                                                                                                   (GEST ) GENSET
W09906551-A2
                                                                                  31-JUL-1998;
                                                                                                                        01-AUG-1997;
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Gaps ö ; DB 20; Length 472; 4.4e-121; Indels 26.4%; Score 452; DE 99.6%; Pred. No. 4.4e Conservative Best Local Similarity Matches 452; Conserv Query Match

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120 72 9 13 GGCATCTGCCCGAGGAGACCACGCTCCTGGAGCTCTGCTGTCTCTCAGGGAGACTCTGA 1 GGCATCTGCCCGAGGAGCCCCACGCTCCTGGAGCTCTGCTGTCTTCTCAGGGAGACTCTGA g δ

180 192 133 TTTCCTCCTTTTTGCCTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACT TTTCCTCCCTTTTTGCCTGTGTCAAGATGAATACATGGAGTCTCCACAAACCGGAGGACT 121 a ò

240 ACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACAGGCTTTCGAGGCTACCAAGGCCC 193 ACCCCCAGACTGCAGTAAGTGTTGTCATGGAGACTACAGCTTTCGAGGCTACCAAGGCCC 181 ò g 300 312 CCCTGGGCCACCGGGCCCTCCTGGCATTCCAGGAAACCATGGAAACAATGGCAACAATGG 253 cccredeccaccegeccrecrescarrecassaaccarescaarsaarsa 241 엄

AGCCACTGGTCATGAAGGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGCCTCG AGCCACTGGTCATGAAGGAGCCAAAGGTGAGAAGGGCGACAAAGGTGACCTGGGGCCTCG 301 313 ŏ pp

<u> AGGGGAGCGGGGCAGCATGGCCCCAAAGGAGAGAAGGGCTACCCGGGGATTCCACQAGA</u> 361

77. TCAGCATGTCCAGTTATAAAAGGAAGGGCAAATCAAAATCCTTCCACCATTCTTCCTGTGC 136

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The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for:
(a) assessing whether a patient is afflicted with prostate cancer;
(b) monitoring the progression of prostate cancer in a patient;
(c) assessing the efficacy of a test compound to inhibit prostate
                                                                                                                                                                                                                                     cytostatic; carcinogen; pharmacodyanamic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  selecting a composition for inhibiting prostate cancer in a patient, assessing the prostate cell carcinogenic potential of a compound; determining whether prostate cancer has metastasized in a patient; assessing the aggressiveness or indolence of prostate cancer in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (c) assessing the efficacy of a test compount to concer in a patient;
(d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient;
in a patient;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 472 BP; 141 A; 105 C; 92 G; 134 T; 0 other;
              433 ACTTCAGATTGCATTCATGGCTTCTCTGGMACCC 466
                                                                                                                                                                                                       Human prostate expression marker cDNA 56772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
ACTICAGATIGCATICAIGGCITCICIGGCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 10943; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R, Endege WO, Monahan JE,
                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                       2000US-183319P.
2000US-189862P.
2000US-207454P.
2000US-211314P.
2000US-211910P.
                                                                                                          ABV56781 standard; cDNA; 472
                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001; 2001WO-US05171.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-255281P
                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                     Human; prostate cancer;
pharmacogenomic marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                              WO200160860-A2
                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                          17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-DEC-2000;
                                                                                                                                                                       17-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUL-2000;
                                                                                                                                                                                                                                                                                                                                              23-AUG-2001
                                                                                                                                         ABV56781;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Schlegel
                                                                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2
421
                                                                           RESULT 26
ABV56781
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Sequences AAF93180 - AAF93743 represent polynucleotide sequences encoding human SRT proteins. The CDNA sequences are isolated from various different human tissue CDNA libraries. The invention relates to a method for detecting cDNA encoding an SRT protein, a vector containing cDNA encoding SRT, a host cell transformed with the vector, an isolated SRT polypeptide, and an antibody which binds to SRT. The polynucleotide sequence can be used in gene therapy and is useful in the recombinant production of SRT polypeptides, as a hybridisation probe to screen libraries to isolate cDNAs with sequence identity to SRT polypeptides, to map the gene encoding the SRT polypeptides and analysing genetic disorders, tissue typing and disease tissue detection. The SRT polypeptides polynucleotide sequences can be used in polymerase chain reaction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a SRT polypeptide is useful
                                                                                                                                                                                                                                                     945 TCACGCTACAGGTACACCAATAATGTTGGACAATTCAGGGGCTCAGAAGAATCAACCACA 1004
                                                                                                                                                           316
                                                                                                                                                                                            944
                                                                                                                                                                                                       196
                                                                824
                                                                                               256
                                                                                                                               884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ID 240
                                                              ACCACCAACGCTTCTCCACCTTTGCAGGATTCCTGCTCTTTGAAACTAAGTAAATATATG
                                                                                885 AACATTAAAGTTGAGGGTTTTACATTGCTGTATTCAAAAAATTATTGGTTGCAATGTTGT
                                                                                                                             ACTAGAATAGCTCCACTTTGGGGAAGACTTGTAGCTGAGCTGATTTGTTACGATCTGAGG
705 TGAAGCTAGCCAAAGGGGATGAGGTTTGGCTGCGAATGGGCAATGGCGCTCTCCATGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for production of recombinant SRT polypeptides, gene mapping, diagnosing genetic disorders and for gene therapy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA encoding SRT protein isolated from prostate tissue SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; SRT; gene therapy; gene mapping; tissue typing; ss
                                                                                                                                                                                                                                                                                                                  1005 AAATAGTCTTCTCAGATGACCTTGACTAATATACTC 1040
                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; Fig 240; 663pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            AAF93419 standard; cDNA; 546 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GETH ) GENENTECH INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-112729/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200107611-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF93419;
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3

Gaps

5;

DB 23; Length 472; 54; Indels

Score 345.6; DB 2 Pred. No. 4.4e-90; 0; Mismatches 54

20.2%; 87.7%;

Consérvative

Best Local Similarity Matches 400; Consér

Query Match

TCAGCATGTACAGCTATGAAATGAAGGCAAATCAGATACATCCAGCAATCATGCTGC 704

645

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forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytckine activity; cell proliferation; differentiation; haematopolesis regulation; this was growth regulation; reproductive hormone regulation; chanchactoric; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ds.
                                                                     protein; EST; expressed sequence tag; diagnosis;
                                                     Human secreted protein 5' EST SEQ ID No 149
        AAX39554 standard; DNA; 472 BP
                                      (first entry)
                                                                     secreted
                                                                                                                        Homo sapiens
                                      21-JUN-1999
                       AAX39551;
AAX39551
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W09906551-A2

11-FEB-1999

31-JUL-1998;

98WO-IB01235

97US-0905133 01-AUG-1997;

(GEST) GENSET

'n Lacroix Duclert A, Dumas Milne Edwards J,

WPI; 1999-153781/13. P-PSDB; AAX11485.

New nucleic acids encoding human secreted - proteins obtained from CDNA libraries prepared from substantia nigra, cerebellum, surrenals and fetal brain tissue

Claim 1; Page 263; 434pp; English.

human secreted proteins, and encode the proteins given in AAX19374 to human secreted proteins, and encode the proteins given in AAX11374 to AAX11331, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for products for diagnosis and therapy. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation/differentiation activity, reproductive hormone activity, tissue growth regulating activity, reproductive hormone activity, tissue growth regulating activity, reproductive hormone thrombolytic activity, receptor/ligand activity, anti-inflammatory activity, tumour inhibition activity or other activities. The products on the sequences can also be used for obtaining orresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide into a membrane, or importing a polypeptide into a cell.

Sequence 472 BP; 108 A; 130 C; 134 G; 99 T; 1 other;

472 127 0 Length:
Matches:
Conservative:
Mismatches: Indels: Gaps: 8.58e-49 721.00 99.22% 99.22% 52.74% Percent Similarity: Best Local Similarity: Alignment Scores: Query Match: Score:

US-10-036-041-2 (1-246) x AAX39551 (1-472)

83 ö

BP AAF93419 standard; cDNA; 546

AAF93419;

(first entry) 21-MAY-2001

cDNA encoding SRT protein isolated from prostate tissue SEQ ID 240.

Human; SRT; gene therapy; gene mapping; tissue typing; ss

Homo sapiens

WO200107611-A2.

01-FEB-2001

21-JUL-2000; 2000WO-US20006.

26-JUL-1999;

(GETH) GENENTECH INC.

Wood WI; Baker KP, Goddard A,

WPI; 2001-112729/12.

New isolated nucleic acid molecule encoding a SRT polypeptide is useful for production of recombinant SRT polypeptides, gene mapping, diagnosing genetic disorders and for gene therapy

Claim 2; Fig 240; 663pp; English.

human SRT proteins. The cDNA sequences are isolated from various different human tissue cDNA libraries. The invention related from various for detecting cDNA encoding an SRT protein, a vector containing cDNA encoding an SRT protein, a vector containing cDNA encoding an SRT protein, a vector containing cDNA percedured and an antibody which binds to SRT. The polynucleotide sequence can be used in gene therapy and is useful in the recombinant production of SRT polypeptides, as a hybridisation probe to screen libraries to isolate cDNAs with sequence identity to SRT polypeptides, as a hybridisation probe to screen libraries to isolate cDNAs with sequence identity to SRT polypeptides, to map the gene encoding the SRT polypeptides and analysing genetic polynucleotide sequences can be used in polymerase chain reaction, screening for new therapeutic molecules and generation of antisense RNA and DNA. Sequences AAF93180 - AAF93743 represent polynucleotide sequences encoding